



**Participate budgeting in Berlin:**  
Socio-Ecological proposal for  
"Haus der Statistik"

**POLITECNICO DI TORINO**

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**Participate budgeting in Berlin:**

Socio-Ecological proposal for "Haus der Statistik"

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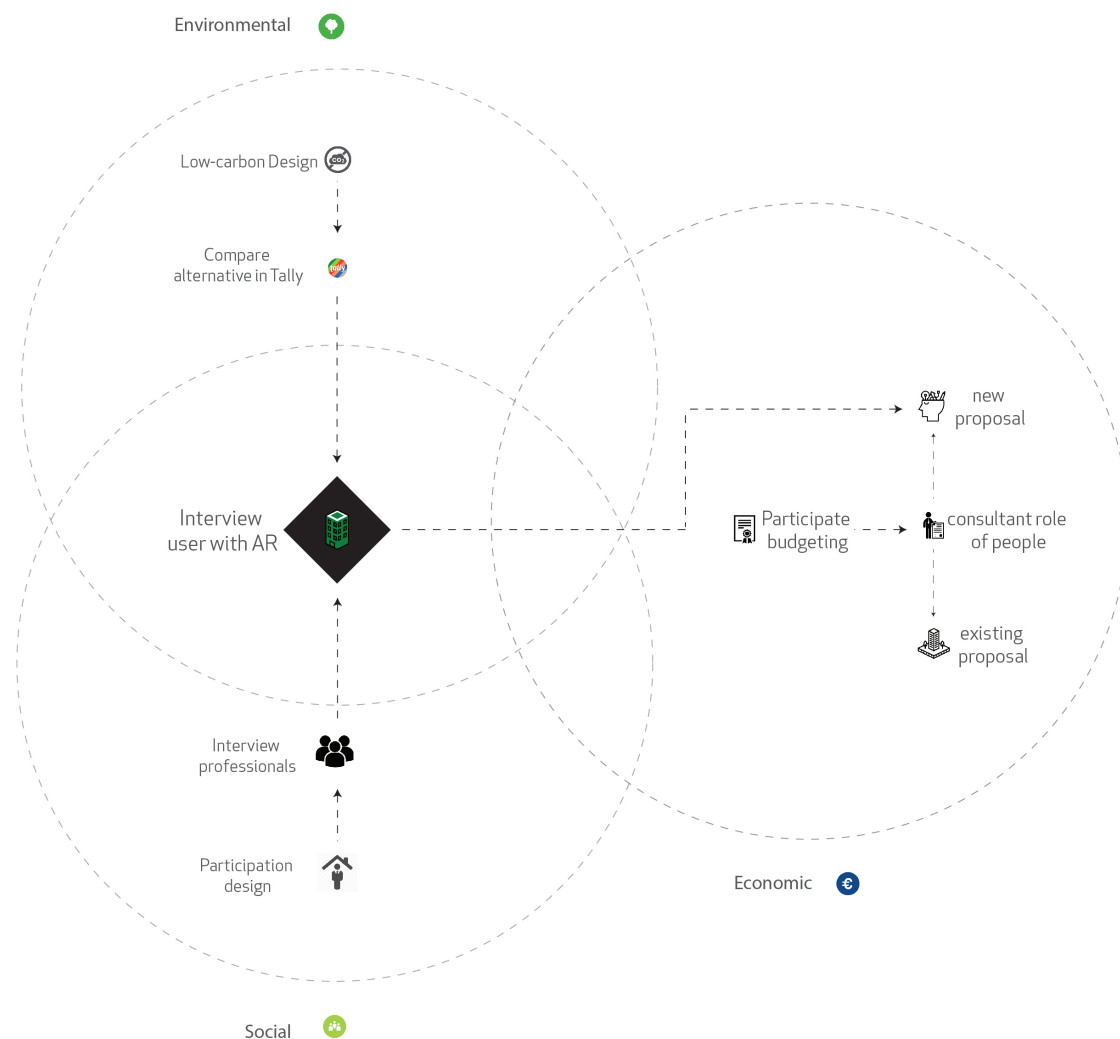
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## ABSTRACT

This thesis proposes a comprehensive framework for German authorities to implement participatory budgeting. The focus of this proposal revolves around enhancing the “Haus der Statistik” building, either by adding a new building or enhancing the existing one. Two key directions were considered: social and ecological aspects. For the social component, interviews were conducted with professionals involved in the project, including designers and stakeholders, to gather valuable insights and ideas. On the other hand, the ecological aspect involved two options aimed at calculating and reducing the CO<sub>2</sub> footprint while ensuring measurable results. The perspectives and opinions of the general public were also sought, allowing for a combination of ecological efforts with social considerations in the initial design phase. Through this comprehensive approach, valuable ideas and conclusions were derived, paving the way for the realization of a final result that harmoniously balances both social and ecological aspects.

**Keywords:** Participatory budgeting, Haus der Statistik, Social aspect, Ecological efforts, Interviews, CO<sub>2</sub> footprint.



(Fig. 1) Elaborated by the author



# 1

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Participatory  
design

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In germany, especially if you think about stuttgart for example, the train station that was supposed to be built has a very innovative design. and there was an intense conflict around it because suddenly, people realized that trees are going to be cut down. if you get people involved from the earlier stage, then they may know the size of the footprint that this building may have. so any-how, it is not wasted energy to try to get locals involved.

interview with francis kéré on his  
distinct earth-building technique  
(christina petridou | designboom, 2021)





Participatory  
design(PD)

(MITKUNSTZENTRALE, 2022)



## **Introduction**

Today, we can say that architectural process design is a collaborative process because of how it has evolved over time. Now we are talking about the collaborative character of design, which has several components. Plans that in the past would have required the work of a single designer are now created by engineers, other technological professionals, experts in finance, law, management, public relations, social work, health advice, city officials, industrial designers, interior decorators, and last but not least, users. While they may occasionally design together in the same physical area, more often than not they choose the living space together without taking the demands and precise concepts of the building's intended users into consideration.

– How did this occur? Could we change the way we build an architecture by taking users' needs seriously?

We could now consider architecture design to be a complex process that requires additional guidance. These fundamental new requirements and opportunities resulted from the New Environment, which changed conventional design approach into a collaborative activity.

According to Tzonis's (2000) research, there are numerous new needs that we should take into account throughout the design phase of our projects. One of them is the need to be more effective in solving highly complex design problems and another one is the need to develop a transparent, explicit, legal picture of accountabilities in design decisions as well as the need to respect beliefs, needs, and aspirations of a wide range of groups considering them as design participants (Tzonis, 2000).

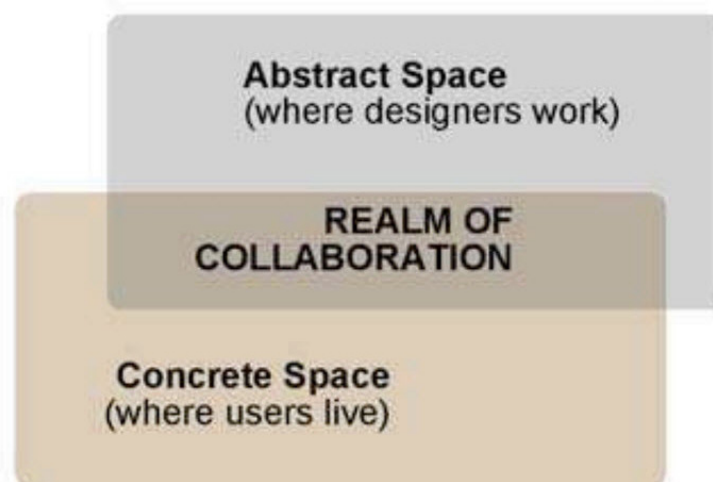
Let's start by defining the term "participation." According to the (Oxford advanced learner's dictionary, 1995) it means: "the act of taking part in an activity or event." The word "participation" in English is derived from Old French *participacion* and Late Latin *participati* (act of participating). a right to profit-sharing or ownership. Participation is the action of engaging in something. the procedure through which people, groups, and organizations can participate actively in a project or program of activity after being consulted about it. the quality of being a part of a larger system.

Participation can mean having a piece of something in common with others—sharing the cake; or doing something in common with others – playing in a game of football. Such simple definitions already provide many implications. ‘Design Participation’ is a complicated issue and it is important to understand its fundamental meaning from its terminology (Lee, 2016, p. 48).

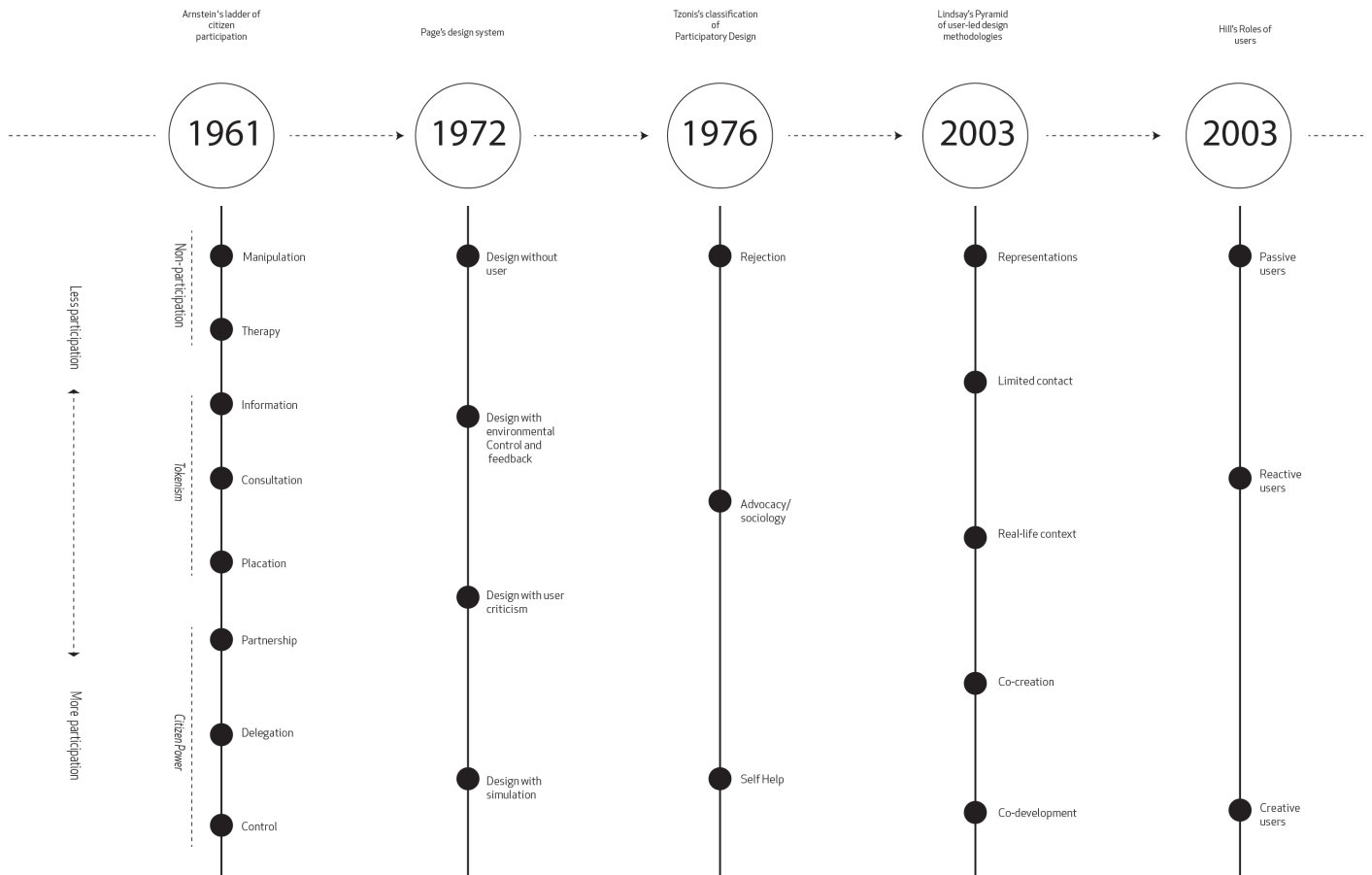
When combined with design, participant design becomes more complex and involves additional elements like politics and society. In research from Florian (2022) Participatory design is a democratic process that aims to offer equal input for all stakeholders, with a particular focus on the users, not usually involved directly in the traditional method of spatial creation. The idea is based on the argument that engaging the user in the process of designing spaces can have a positive impact on the reception of those spaces. It eases the process of appropriation, helps create representative and valuable spaces, and thus creates resiliency within the urban and rural environment.

One may presume that clients are interested in information, consultation, and decision-making, yet even in this case there may be varying levels of interest and greater or lower autonomy for the architect and other professionals working in the built environment. Additionally, it’s possible that clients won’t participate much in the construction phase or in any kind of post-completion review.

How much architects and clients could want this is a different question, as are the stages of the process that users might find most interesting, such as the design and post-completion stages. The general public may be interested in information and even some form of consultation on new buildings, particularly if they are directly impacted as neighbors and regarding important public buildings, but they are probably less likely to have the opportunity to participate in any form of decision-making.



(Fig.3)Combination of Design Participation Benchmark (Lee, 2016, p.104)



(Fig.2) Different levels of participation over time (Elaborated by author)

In terms of history, the situation at the start of the 20th century was one of various clients (often distinct from the users), a group of professionals (all working within the confines of their professional organizations), a group of builders and suppliers (typically acting through a general contractor), with an increasingly complex set of broad social and cultural parameters affecting the design process. In general, nevertheless, the architect had a privileged position during the first half of the 20th century in coordinating these ever-more complex design and construction processes and choosing the final form. However, by the start of the twenty-first century, the architect's general coordinating position had been greatly diminished in many buildings to a role that was dominated by other professionals.

A British Design Scientist named John Page<sup>1</sup>, who served as the first Chairman of the Design Research Society from 1967 to 1969, presented a paper at the DRS Conference in 1972 titled "Planning and Protest" in which he offered a thorough and scientific explanation of user participation in design and processes through a series of diagrams showcasing various design and planning organizational structures.

1. Page (1972) made the initial suggestion that the focus of the argument on user engagement was the separation between the worlds of designers and users:

User-controlled adaptive design is a possibility, according to Page in 1972. If the design machine is still operating as a black box, the user is nonetheless effectively erased. This black box (user-controlled adaptive design) effectively replaced the designer's function. This is an additional instance of "design without designers," in which system designers give consumers options. Utilizing computer systems is one method of doing this. The promotion of user involvement in the design process, user autonomy, and the use of adaptive systems all had a role in the development of computer-aided design (CAD).

## Participatory design(PD)<sup>2</sup>

The major method used by Participation design to involve consumers in the design process is to attend meetings with design engineers. The strategy's "participatory" quality is provided by this simple idea. Participation in this context is usually understood to mean taking part in talks rather than directly contributing to the construction of a system like engineers or constructors.

While this would sound simple, it turns out that a number of problems arise at these meetings, often as a result of communication problems between people with different degrees of knowledge and worldviews.

Florian(2022), on the other hand, thinks that there is a gap between the objectives and the practice of involvement : "The architect and the team of experts set the frame of reference and the terms of the discussion. By applying their expert knowledge to create the system, they assume authority over the inexperienced layperson. This power structure must be broken in order to develop a participatory process that empowers the user. The many structural difficulties mean that the participation is often presented to the public to gain its support, yet it is not always substantiated by actual transformative involvement. "(Florian, 2022, para. 2).

2.Before looking at the terminologies of Design Participation, it is necessary to make a clarification of the meanings and relationship between 'Design Participation' (DP) and 'Participatory Design' (PD). 'Design Participation' is not an everyday term and it is common that members of the design community will associate. Participatory Design is one of many problem-solving design techniques whereas Design Participation is a way of thinking about design, which aims to develop new design through different techniques, of which Participatory Design can be one (Yanki, 2016).

Numerous practitioners, as well as geographic and institutional diversity of practice, are considered important by Muller (1993) in the study. One of the two issues resulted from this:

Practitioners may need some guidance in finding techniques that are appropriate for their particular circumstances. He suggests three factors we should think about in order to solve this problem:

- Time during the development life cycle.
- Who participates with whom in what?
- Appropriate group size for the practice.

### **Toward a basic history of participation design worldwide**

The origins of participatory design can be traced to northern Europe, where two research projects investigating worker empowerment with regard to technology were combined. It is usually believed to have evolved from the Scandinavian “collective resources” research program, which emphasized the teaching of union executives and members about diverse manufacturing methods in order to empower unions during contract negotiations.

The Participatory Design Movement continued in North America through the middle of the 1980s, according to Jeng (1995)<sup>1</sup>. This fresh approach to participatory design put an emphasis on enhancing the office setting and providing user-friendly technologies. Sweden’s Interactive Institutes network, for instance, can show off this stream.

Due primarily to the political reform<sup>2</sup> implemented by the New Labour Government starting in 1997, there has been a sharp rise in the number of organizations in the UK engaged in collaboration between the design community and the general public.

The Third Way, a new take on the “welfare state,” is the name of the political framework used by this New Left administration. The government’s function as a future investor is emphasized in its approach, which also emphasizes cooperation and partnership.

1. “Since the mid-1980s, starting in Scandinavia and then North America, there has emerged a new stream of participatory design which focuses on improving the workplace environment and user friendly technology. It sees the users as the experts and the designers as the technical consultants. This new trend focuses on the economy and productivity of the industrial workplace through the participatory design approach. It has also been applied to the development of computer technology as the new approach towards computer systems design in which the people destined to use the system play a critical role in designing it” (Jeng, 1995)

Community architecture in Britain started to lose relevance in the 1980s, notably within the design community, as a result of this kind of vocal opposition from the design community. Due to the decrease in “public-sector commissions,” its reduction shows the shifting role of participation in design.

Although London has had a thriving Design Participation industry since the 1970s, there are no such initiatives by designers or architects in Hong Kong’s<sup>1</sup> housing development sector. The main difference between Hong Kong and London is the absence of Design Participation activities in the context of collaboration. In Hong Kong, more Design Participation activities have been begun in people’s space in the form of community development programs. In Hong Kong, there is a “gap” between design professionals’ and peoples’ spaces. These two locations are not directly connected.

### **Participation design in context: Architect as an activist**

Jeremy Till (2005) proposes a shift in the way we conceptualize the issue: instead of fixating on the building and seeing the user as objects, to transfer the attention to their context. To develop this knowledge from within, the architect must project themselves into the spatial, physical, and social context of the user. It calls for an ability to move between the world of the expert and the user, with one set of knowledge and experience informing the other. The architect should take a position to both lead and represent, to become an active participator in the practical life without denying their expert knowledge or the opportunity to guide.

He although say: “This suggests that in order to enable transformative participation, architectural knowledge should not be applied as an abstraction from the outside, but developed from within the context of the given situation.”<sup>2</sup>

In another definition Lerup (1977) believe: To develop this knowledge from within, the architect must project themselves into the spatial context, physical and social, of the user; the architect becomes ‘an activist, working on behalf of and as a dweller

1. Prior to its 1997 return to China, Hong Kong spent 100 years as a British colony. Hong Kong’s governmental structure and urban planning are modeled after a British city, down to the street signs and mailboxes. The social ramifications of design are also highly different in these two cities.

## Participation level: essential for decision-making

To be able to explain differences in the level of developments of Participation Design and their relationship to social development, it is essential to construct a tool to identify different levels of Participation Design in various design and decision-making processes. The fact that "participation" is an accepted broad term covers the fact that there are many degrees of engagement in every participatory process, from little participation to total control by citizen participants. These levels are listed in the well-known "ladder of involvement" that Sherry Arnstein creates (Fig.4).<sup>1</sup>

**Manipulation and Therapy:** They both lack participation. The participants are intended to be healed or educated. The best plan is the one that has been suggested, and participation's task is to win public support through public relations.

**Informing:** A crucial first step to participation that is legal. But all too often, there is a one-way flow of information emphasis. Absence of a feedback route

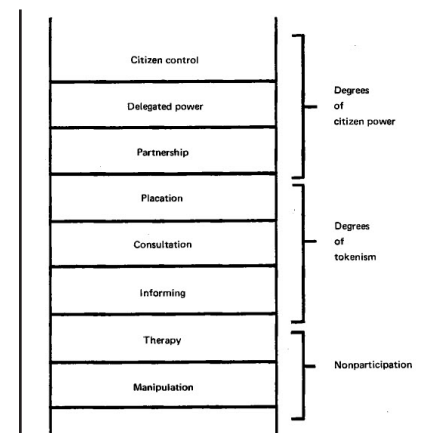
**Consultation:** Surveys of attitudes, neighborhood gatherings, and public inquiries are again viable steps. Arnstein, though, continues to believe that this rite is really a façade.

**Placation:** It gives people unlimited freedom to plan or give counsel, but it preserves the power to decide whether or not the advice is valid or practical.

**Partnership:** In reality, power is redistributed through negotiations between citizens and those in positions of power. Joint committees are one way that planning and decision-making responsibilities are shared.

**Delegated power:** Citizens possessing a resounding majority of the seats on committees with delegated decision-making authority. The public can now ensure that the program is accountable to them.

**Citizen Control:** Without any middlemen standing between a program, such as a neighborhood corporation, and the source of funding, the have-nots do all of the planning, policy-making, and management tasks.



(Fig.4) Arnstein Ladder (1969)  
Degrees of citizen participation (p.217).

1. The power structure can be determined using the ladder whenever significant decisions are being made. It has endured for so long because individuals still have to deal with systems that only take into account the very bottom rungs of society.



AR:  
as a method of participation

(MITKUNSTZENTRALE, 2022)



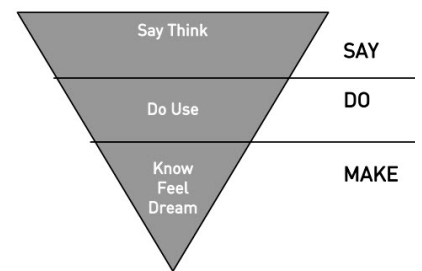
## Methods of Participation

Sanders (2002) argues that the design process should be a collaborative and participatory one, and she lists seven actions that designers can engage in to learn from others. She further categorizes these actions into three ways that designers can access experience to create three different types of tools: "SAY," "DO," and "MAKE" to comprehend and develop empathy with those who use products and information systems.

Additionally, Sanders exhorts designers to investigate all three tools at once. The "SAY" and "DO" tools come from classic design research and market research, respectively. The SAY and DO approaches make reference to more conventional user study techniques like observation and interviewing. The new "MAKE" tools are concentrated on what users produce and make from the instruments that designers give them to use in expressing their ideas, emotions, and aspirations.

On the other hand, Lee (2006) emphasized a different factor that might characterize the relationship between a designer and a user: 'Designing for people' and 'empathy with people' are two main developed 'slogans' of user research methods development in the past two decades. It is important to point out that there is difference between the 'for' and 'with' user research methods.

In fact many participation projects are characterised by conflicts between the different parties working for users. For the design community, Community Participation projects become part of Design Participation when there are a lot of design inputs in the processes or when designers take the initiative. When Public Participation projects involve design, especially involving the public realm, they will start to merge with the domain of Design Participation. Who initiates the process is the main criterion to classify the mode of participation(Lee,2006).The term 'participation' can mean different things for different people in societies or even the same community. Three modes of participation are defined which are working across the three different spaces. This tree modes of participation that Lee (2006) define is that:



(Fig.5) Sanders' (2002) diagrams of user research tools

## Design Participation (DP)

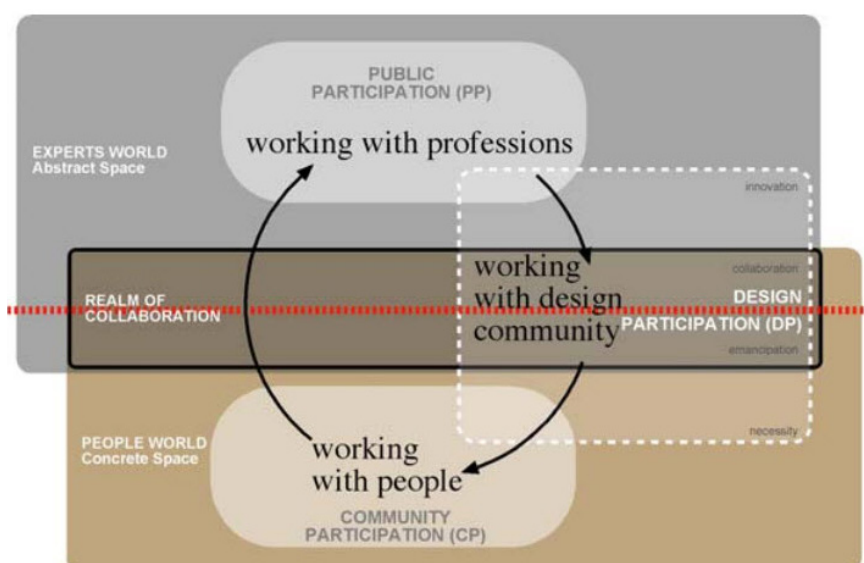
This term was first adopted collectively by the 1972 Design Research Society (DRS)'s conference entitled 'Design Participation'. It developed as a type of participation in this research. This type of participatory project is initiated by designers, design-related stakeholders or users groups. They spread across the worlds of experts, users and the realm of collaboration. Their common aim is to generate user-centred design. They can be for innovation, collaboration, emancipation and motivation as discussed later. Designers take on the role of actively trying to improve design and at the same time people's lives (Lee ,2006,p.107).

## Public Participation (PP)

'Have Your Say' or 'We Need Your Voice' are the common slogans of public participation projects. The organisers, usually governmental departments, publish consultation papers and invite people to express opinions on particular issues. The idea is that people are invited to influence the decisions made by the organizers by expressing their positions. People are encouraged to take the opportunity to have their say. Their comments are then collected using different methods and are used to inform policy reforms or civic education campaigns. These consultations are initiated by policy-makers, public service agents and other public sector figures. Since most of these projects are policy-oriented, their aim is to understand some specific public issues from the policy makers' perspectives i.e. top down approach from the world of experts. Designers are part of the expert group that give advice on the construction of the project (Lee ,2006,p.106).

## Community participation (CP)

Compared to Public Participation, Community Participation projects are more about problem solving than strategic development. Most of them are initiated by social workers or NGOs who work closely with people providing social services to help people's lives. These workers are working in the world of people and the participatory processes are customised to deal with the needs of specific communities. The aims are to empower people to fight for social justice within the experts' world. This bottom-up approach requires advice from different experts such as designers or architects to generate strategies to deal with experts who have an influence on the built environment, especially governments or big corporations (Lee ,2006,p.106).



(Fig.6) Action plan of Design Participation Tactics - more collaborations between those from different operating spaces(Lee, 2006,p.249)

## Augmented reality(AR)<sup>1</sup>: as a method of participation

Computer-aided architectural design (CAAD)<sup>2</sup> research has frequently investigated the realm of public participation in large scale urban design redevelopment. Cultural shifts have created a need to involve the end-users in these activities. CAAD has been quick and plentiful to offer solutions, yet, the recurring problem lies with the lay-person not being able to interpret information effectively and be able to take part in the process of design proactively. To date, much-existing research predominantly focuses on the development of designs in urban settings using high tech devices that fundamentally require a high level of expertise, or an experienced 'guide', to help navigate or create within these environments (Silcock, 2020).

Previous participation events show that citizens have some ideas for the redesign of their city. They do not always express them well due to a lack of tools, but their ideas could be made comprehensible through visualizations. (Saßmannshausen, 2021)

Since its inception, augmented reality has become increasingly popular, which provides clues as to where it will go in the future. Thus, while addressing the issues listed at the start of the design process, the solutions being developed in contemporary AR show enormous potential. The degree of accessibility and social acceptability would permit clear communication of the solutions with a public and, as a result, give them a chance to have a significant role in the design process.

A person can cycle through design possibilities that are unusual for ordinary people using this AR method. A option to go from planning space from a "bird's eye" view to seeing it from a more familiar street-view position is provided to person viewers in parallel with this interaction. Early on in this project, the focus might be on creating the tools that allow individuals to participate in the urban design process. The tool's initial iteration focused on a broad augmented reality workflow with the objective of transferring data from an interactive program to an AR environment.

1. Augmented reality (AR) is the integration of digital information with the user's environment in real time. Unlike virtual reality (VR), which creates a totally artificial environment, AR users experience a real-world environment with generated perceptual information overlaid on top of it (Gillis, 2022, para.1).

2. CAAD (computer-aided architectural design) are a distinct class of CAD (computer-aided design) software developed for the use by architects and planners. All CAAD systems employ a database with geometric and other properties of objects which can be manipulated and assembled through a graphical interface (CAAD - Computer-aided Architectural Design - Guide for Digital Design, n.d.).

## **Interview: Construction of the interview guide**

The participatory design approach used by interview involves the three processes of problem identification, ideal solution formulation, and solution presentation. The story underlying a participant's experiences can be learned through interviews. The interviewer can look into the subject in further detail. Interviews may be helpful as a follow-up with some questionnaire respondents, for example, to delve deeper into their comments.

In her PhD thesis, McNamara (1999) outlines a number of practical classifications and guidelines that interviewers may find helpful:

Before you start to design your interview questions and process, clearly articulate to yourself what problem or need is to be addressed using the information to be gathered by the interviews. This helps you keep clear focus on the intent of each question.

### **Types of Interviews**

1. **Informal, conversational interview** - no predetermined questions are asked, in order to remain as open and adaptable as possible to the interviewee's nature and priorities; during the interview, the interviewer "goes with the flow".
2. **General interview guide approach** - the guide approach is intended to ensure that the same general areas of information are collected from each interviewee; this provides more focus than the conversational approach, but still allows a degree of freedom and adaptability in getting information from the interviewee.
3. **Standardized, open-ended interview** - here, the same open-ended questions are asked to all interviewees (an open-ended question is where respondents are free to choose how to answer the question, i.e., they don't select "yes" or "no" or provide a numeric rating, etc.); this approach facilitates faster interviews that can be more easily analyzed and compared.
4. **Closed, fixed-response interview** - where all interviewees are asked the same questions and asked to choose answers from among the same set of alternatives. This format is useful for those not practiced in interviewing.

## Interviews

The General Interview Guide (GIG) approach was employed in conducting the interview, involving four knowledgeable professionals. The first interviewer, Mr. Machleidt, holds a prominent position at the Haus der Statistik and oversees the Urban Development Department of the Senate. With expertise in budgeting, planning, and social impact, Mr. Machleidt provided valuable insights into the project's strategic aspects and its potential influence on the surrounding community.

The second interviewer was the BIM manager, responsible for overseeing the project and working at one of Berlin's renowned architectural firms directly involved in the undertaking. This individual was well-informed about the project's current status, offering valuable details on the efforts made to incorporate social and ecological considerations throughout the design and construction phases. Their perspective shed light on the implementation of sustainable practices and the project's overall commitment to creating a positive impact on the environment and society.

Additionally, the interview panel included other architects with expertise in Berlin's architectural landscape, particularly in the specific area under consideration. Their presence aimed to explore the potential influence of local design principles and the prevailing atmosphere in Berlin on the project's design. Their insights contributed to a holistic understanding of how the project aligns with the architectural context and the unique character of the city, ensuring a comprehensive evaluation of its potential impact and integration within the region.

## **Interview Information:**

**Name:** Jonas Machleidt

**Gender:** Man

**Age:** 40-50

**Personal background:**

Senate Department for Urban Development, Building and Housing  
Department II – Urban Planning and Projects

**Interview Date and Duration:** 25.01.23

**Interview Setting:** Online

**Interview language:** English

**Location:** Berlin.

Interview: . Hello, Thanks for the time and consideration. So first of all, I would like to say that I record your voice and video with my laptop. I think we could begin with your actual role in the project. I would like to say that about my thesis. That is about exactly the Haus der Statistik and yeah. Find the experience that you and your partner and also other people gathering in this project and then try to find the way that participates the people in my project and find a way to maybe add value to this project or maybe go forward with the other experience.

Mr. Machleidt: Before we get into the details, for me, it's totally fine for you to record our interview in order for your studies and in order for all things university, but do not have permission to grant you the public publication of the interview. So please note that it should not be published.

Interview: So we could begin with your introduction about the project, about your role, about your connection with the others, and anything that you did.

Mr. Machleidt: Okay. So, um. Very broadly speaking, we do have a cooperation of five partners. We have four partners from the administration, which I'm working for, um, which is the administration of the state of Berlin. Then we have, which is the local authority, the regional government, and then we have the BIM, which is Berlin Property Management and they're responsible for the property.

Basically, the property is in is under their administration and then we have housing authority from the state of Berlin. One of six. And they're responsible for housing projects in the center of the city and the fifth partner is. special project model project for the city of Berlin because the long time we had like this, uh, coexistence of, um, public projects. And private projects and the sort of. Do their own thing on their respective. On their respective. Um, parts of town and their properties. And this time. We're gonna "Haus der Statistik". We're trying to mesh them together. Because as you know, Berlin is growing very rapidly, especially during the last 10 to 15 years.

We have we as the city of Berlin have to go to. Some kind of change in our planning approach because of the long, long time we had. We had a lot of properties, especially in the center of the city, which is unusual for a European city. But due to Berlin's specific history, there was a lot of property in the center of the city. After the reunification. 1990. So you can see those projects as well. If you look at Potsdamer Platz or Europa City next to the main station, those are all kinds of developments from the 90s and the early 2000s that try to repair the city. But since the growth of the city only kicked in ten years ago, there was no real need to make them that dense. Some of them. But pretty dense. And some of them were not. But we usually had space in the center of the city. And also Berlin was going through a bit of a financial crisis, so the city had no money and they have to sell a lot of their property. And Haus der Statistik some kind of marks turn around point for those activities because it was the statistic the city bought the property back from um from the government of Germany. And so we invested money in the site and in the property.

Then the approach is not to, um. Not to develop mono structures used next to each other, but to kind of integrate them into one. And the initiative, the public initiative, had a big role in that because they basically kick-started off the project by demanding. Spaces in the center of the city for public users. Users for social users. For users, for artists. And, um. In education. So that's why the cooperation of five was formed. And each of those partners has different tasks in the project. But the main task is to learn how to fuse different users, public users, housing users, administration users, and also social users and users for others and education into one property because the approach so far was if you need an administration space, a house for your local administration. They were given one house. Uh, or they were given a site to develop a new house. And the House only contains the administration, which works fine for the outer parts of the city, but for the inner parts of the city, the spaces get very narrow and we're running out of property, basically. So we're forced to think about those. Um. To think of those properties, like in a multi-level way, they can be used in different kinds of ways. So that's the narrative behind those statistics.

Interview: Yeah, really great beginning because you have brought the information that we need. Maybe it would be great if we could begin with your communication. I know there is a workshop, and there is a lot of process that tries to contribute to people. Also, construction is beginning. I would like to know how this process goes and what was the potential, what was the problem during this process.

Mr. Machleidt: So I won't give you specific dates because it's hard to remember all of those. You can look those up in the brochures in the link I sent you. Um, but um, uh, for us, the first process that we're heavily involved in was the so-called, uh, um. State, the policy backstop, which means urban planning workshop. So this was a very complex process. As you can see in the brochures. We have a very complex graphic there because it has a lot of complex, complex graphics. But the main theme was not to have a competition, how to develop the site, but to have a workshop with different, um, different, um, urban planners and uh, different bureaus, different providers of urban planning. Uh. Together with the stakeholders with the cooperation of five to make it public. So basically the people living in the neighborhood, which the neighborhood is very. It differs very much because we have in the Northeast, we have, um, the second bidding units. Which is basically mono-structured living. And since it was opened in GDR times in the 70s, there's a structure of mostly elderly people still living there, which those are the ones that moved in there when the site was erected. And on the southwestern part, we have Alexanderplatz, which is also very non-structured, but completely different because it is a very public space.



It's a space for commerce and it's a very tourist-heavy place. So also some kind of a link between those users. And it was very important for us to have the workshop with public aid so everybody could come there and say their opinion. And there were different stages of the process. We had an initial meeting where we basically formed the structure and the concepts. And yeah, basically every statement was integrated and looked upon. And we have to filter out some very exciting ideas, of course. But in the end, um, it was very clear that there was some kind of special ideas for, I don't know, uh. Public bath or something, which was not the thing that the site demanded. But in the end, it was very clear that the public had a pretty good view of the site, which was very much overlapping with what we thought the site would need. So it was very easy to integrate that. And then we had like 3 to 4 more workshops. And in the end, we decided on one urban planner, which then designed the plan to develop the site basically, and that's an urban planner for an Internet cafe in cooperation with Architects, which is a Landscape architect means they developing the free spaces around the buildings.

Interviewer: As I understood from your interviews, one of your priorities was the people also yeah society groups need to consider I mean when the times change maybe people need other things so how did you try to solve this? Yeah, making the flexibility maybe or maybe another opportunity. How did you think to solve this problem to reach that idea?

Mr. Machleidt: Yeah, that's that's actually a great question because it's one of the things we cared a lot about. Um, so, um, there are multiple, multiple things that are special in "statistic" first. Uh, and I already said the change of the planning narrative and that the city bought the site, uh, from the government. Uh, and the second most important thing is the so-called pioneer users. It's. Upon the spectrum of education. Uh, social institutes and also integration because we have a lot of refugees in Berlin and we need to take care of them. Um. And also when mean social uses, it really means social uses and not in general, not for the whole of the city, but for the local demand. Because especially at Alexanderplatz, because it is such an urban place and such a metropolitan place, in stark contrast to the living quarter, is to house a statistic which is very. Which is a very local identity and it's really not that much a metropolitan area, if you will, or at least the people don't feel so. And it feels so if you walk through there. So it was very important to look at the local needs and Alexanderplatz, there are a lot of them because it's such a big train station and it's I don't know, it's very common everywhere.

But a great train station somehow draws in a lot of homeless people. And there's also a lot of, um. A teenager is basically living on the street at Alexanderplatz. So that was a great need. But you're totally right. Needs can change, and we cannot, um, we cannot foresee what will be the needs in 10 to 15 years, especially with all the elderly people at Karl-Marx-allee when they finally move out or there's a change in the local population.

We don't know what the need will be. So the pioneer users were our tool to, um, to make sure that there's the, there's the possibility of, of, uh. There's flexibility in what we can and what we can make a toast, A statistic. So, um. We have them installed before the construction even began. Which was pretty special. Um, but, um, we did it to activate all those initiatives and to put social users there, to put education users there to cultural users there in order to connect the with the surrounding area. And what we're doing right now is we try to hold them during the construction phase. And then when the construction is finished, which will be finished in different steps. But that was key for us to install them first and then keep them on the site during the construction.

Um, and that was a big part of what the tech hub did because they're basically managing those pioneer users right now. So, um, if you were a pioneer user and you care about refugees and you, you, you have. You have activities to integrate them or to, um, to show them what kind of administration needs they have and how they can achieve them. Or if you need a language school or something like that. Uh, there's, there's an opportunity and also statistics. But those pioneers are not fixed for the next. They don't have they don't have they don't have a space to rent for the next ten years. But they have to prove in very short, um, phases. So, um. You can have a pioneering space that "Haus der statistic" for two years and you have to prove that you are that your task is democratic, for example. So we don't have any extreme parties on the left or the right. So you have to be you, you cannot be a political party. Uh, because then you are driven by the goals of the specific party. You have to approve that you, uh, um, that we, you work with other groups in, in a peaceful way. And stuff like that. Those are the criteria for the pioneer users. And then you can have a space for I don't know, there are different types, but one year, one and a half, two years, and then you have to approve again. So that was very important for us. In order to come back to your question, in order to have the flexibility and to make sure that, uh, the pioneers, um, not only, um. Move into the site and do their own thing. But it is important for us that they connect with each other and they and that they will connect through the boundaries of their profession. So, um, you can connect from, from like immigration worker to an artist or to cycle repair shop, bicycle repair shop. So and that's also a big part of, of how the statistic which you cannot see and which is not that prominent in the brochures it's all those networks between our partners and the pioneers, which are very important for us. And big success of the network is the so-called wholesome material, the hearing House of Materialization, which is basically a cluster of people carrying about reusing and upcycling things, which is also very important for us for environmental reasons.

Interviewer: So maybe there is a potential we could go through the ecological part. So would be other activities that could be related to the ecological part. So for example, I had an interview with BIM and they said, we have a part that's considered the ecological part. And also they calculate the CO2. I mean, could you please tell me about the ecological approach, which was in the process of the "statistic" like the material?

Mr. Machleidt: Yeah. Um. So, um. In the 90s in 2000, there was a different kind of planning approach in Berlin and basically, um, completely the complete side of the statistic. Um. Has been planned to be completely demolished and sold to a private investor who could build new houses there. You can see that manifested, which is a very famous general plan for the development of the Alexanderplatz in the 90s. So, um, and that's really the third thing that is special about "Haus der statistic", which makes "Haus der statistic" some kind of a turning point in the narrative of planning. And Berlin is right after the, uh, the government of Berlin bought the property and From the federal government. The decision was made not to demolish, to demolish the site, but to restore the existing buildings, at least 80% of them, because we have this tall building at Karl-Marx-allee and alongside Otto Braun Strasse, and there will be restored by the BIM and Bim will also move in there themselves and also a part of the local tax administration. And that's the first big puzzle piece of environmental care because of all the great energy that has been saved in there. And on the other parts of the site, especially the eastern part of the site, there were like 1 or 2 story high buildings which were originally used by the administration for laboratory uses, um, especially for, um, evaluating. Materials where the name derives from "Haus der Materialisierung". So, um. And if I'm being honest nowadays, we wouldn't even demolish them because of the great energy. But since our urban planning workshop was five years ago, the decision was made to demolish those lower buildings in order to build the housing buildings on the eastern side of the eastern part of the site. Um. But especially in the material which is to be demolished. I think there's this cluster of pioneer users who care about recycling and up-cycling and stuff like that. And not only do they have a really good network, but they're also really connecting to the neighborhood. You can rent tools there to repair your desk. You can have courses there where you can learn how to repair your bike by yourself. You can basically give them stuff which you don't need anymore and they will upcycle it and um, sell it for uh, for revenue so they won't make a profit out of it, but they will collect old clothes in order to recycle them and produce, really produce with the help of the neighborhood. They produce underwear for homeless people because which is a really great demand because you can, um, you can go as a homeless person, you can go and you can get a new coat or you can get new trousers or even new shoes, but you won't, you won't get any underwear, especially warm underwear for the winter. You won't get it because nobody really gives that to the Salvation Army. And even homeless people don't really want to. Stay confused, unaware. So what they're doing at home is they collect all the clothes and then they some kind of scrap them and get that get the material out of it. And then they really stitch together new underwear. Sometimes it's that simple.

Interviewer: Yeah, perfect. What are the challenges? What were the rules maybe? And also this process comes from the government to go to the private sector. I know there is an agreement. how it goes? What was the problem? Was the situation?

Mr. Machleidt: Yeah. So first of all, I have to be clear that there is no private investor on the side. It's all basically public or from a public initiative, so don't have a private investor. So basically, um. Four of the five partners work for the state of Berlin. They're basically they call differently and they're different organization units. But those are all organs of the state of Berlin. And the fifth partner is the public initiative. And since you talk about the public housing company, the, uh, they, um, their task is to administrate and to administrate housing units and to build new housing units for a social price. Basically, the rent is, um, uh, um, they can only get a certain amount of rent for their, for their, um, apartments in order to keep them cheap because the price explosion, especially in rent in Berlin, is gigantic. It's, it's up, I don't know, 200% the last three years or something like that. It's really, it's really hard for normal working men and women to afford to rent an apartment because Berlin is big. Rent city people usually rent their apartments here. I mean, like. 85% or something like that. And in the 90s and early 2000, the rents were pretty cheap. And nowadays, with all the global financial crisis and housing crises, somehow private investors discover Berlin. And, um, yeah, basically since 2010, the prices only go up and they go up very rapidly. Berlin is still not the cheapest town or the cheapest city in. Um, no, it's Berlin is not the most expensive city to rent in in Germany. But the rate that the rents are going up is, um, far beyond the comparison to any other city.

So, um, the task is to build new, new apartments and new housing units and to do that very quickly and very cheaply because the rent has to be low and usually they do that. Um. In the form that the ground floor. Is for commercial use and they can collect the higher rent from the commercial users in order to finance the lower prices on the top floors and "Haus der statistic". They cannot do that because they are not supposed to rent to any private company. We don't see a Starbucks there any time soon. But the ground floors will be used by the now pioneer users, for example, from Hostel Zero. And in ten years they will move to the ground floors of the new housing buildings. Um, which is like a view from, from a kind of urban planning point of perspective. But from a financial point of perspective, it's not that easy because the usual instruments to keep the rents low basically fail at a statistic because we don't want any private companies to have a store there. And so that's basically a problem, um, which we cannot solve with urban planning or architecture, but we can solve it with money. It's simple as that. So if the state of Berlin wants also "Haus der statistic". to function the way it was designed, they have to make sure that the DBM has the financial backing to, um, to keep the rents low, but they have to keep the rents low. There is no alternative. Um, but there has to be a financial agreement since the usual instrument of financing doesn't work at the "statistic". That's a very. A basic problem that comes to my mind right now.

Interviewer: And now about the budgeting, is there any possibility for people to maybe have a rule in this budgeting directly or maybe the rule is connecting just with the planners and planners decide and also you will decide and then the budgeting flows?

Mr. Machleidt: It's also a very good question, but it's a tough one for me because there are so many layers of this project. Generally speaking, for the five partners, um, we heavily depend on, government money, and the process is financed by basically tax taxpayer's money. Um. Which is true. The public partners. The good partner. The financial structure of their own. But I'm not the right person to talk about that. Um. And as I said, the restoration of the existing building by the BIM, the construction of the new housing units by the VBM, or the construction of the new city Hall from Berlin, are basically paid by tax money. Uh, but, um, for me, that's not that unusual because a new town hall will always be paid for by tax money. Everywhere, not only at "statistic". The difference is the "statistic" is that you as the as a neighbor at "statistic" or even if you're not a neighbor, if you are interested in what we are doing at "statistic" or if you, um, if you are active in an initiative that cares about reuse and stuff like that. Um, you can. If you apply the criteria that I talked about earlier, you could basically rent a space at "statistic" or the means of water and heating. There is no profit to be made by the city of Berlin by renting you those places.

Um, I don't know. In Germany, it is "nutzung". It's what you need to, to operate in the space and not. Not much more. That's basically how they finance themselves. But in the end, those spaces at "Haus der statistic" are way, way, way cheaper than anywhere else around Alexanderplatz. And that's what we're trying to do. Because in order for you to care about refugees, in order for you to care about homeless people, you usually don't have that much money and you cannot, or you couldn't before. But it's way harder right now to have those social initiatives. There's no way that in the social initiative, caring about homeless people can basically go to a private and private owner at Alexanderplatz and rent a space there. Impossible. It's only possible at "Haus der statistic" because it is like, um, uh, in terms of usage, it's the opposite of, commercial use at Alexanderplatz. So, um. That's the approach and that's the idea. And um, yeah, that's, that's basically how the financial structure is, um, is constructed and, um. Yeah. Yeah, maybe. Maybe that's enough.

Interviewer: Just one detailed question There is a website for the participating people, investing money, participating budgeting. And is this website or maybe this actual approach that Germany has influenced in this project? or maybe it's different.

Mr. Machleidt: Yeah. Yeah. you really bring me down right now on the financial stuff? I'm an urban planner, so please be kind. Um, there are multiple layers. Of course. We have a system of public budgets. And those were these. These are voted for or rejected by the government, basically. And, um. In Berlin, we have the so-called double horse halter, which means it's a public budget for two years. And after two years, the government must look at it again and approve it and say, okay. And that's basically the public budget which the four public institutions get their money from. And then there's the initiative Ecobee, which mainly gets money from the administration. The percentage for the rent of the pioneer users. And they also bring a lot of different financial structures with them. If you are a pioneer caring about reuse, for example, you can get funding for the Environmental Administration of Berlin.

And that funding can also include paying the rent for “statistics”. But that’s. That’s not, uh, not up to the corporation to decide about those budgets, because they’re basically. Some of them are crowdfunded. We don’t really care how they get their financial stuff together. But the strength of our “statistic” is that we can accept a lot of financial structures and a lot of different financial strength structures. And we can even, um, we can even allow funding money from other administrations to pay for, for our rent because the rent is so dirt cheap. Um, so, so, um, that makes it very complex. But in my opinion, it also makes it very strong because if you are an initiative who really cares about and who is really active and who can, um. You have to fund a lot of financing from different sources. Then you can. You can make the most of it at “statistics”, basically. So it’s a very basic democratic approach, I would say.

Interviewer: Um, I would say really. Thanks for your time.

Mr. Machleidt: Thank you so much for your curiosity. I couldn’t tell you anything more anyway, so it’s good that we finished. Um, lastly, I would like to ask you when you will finish your work and if you do so, uh, it would be very nice to, see the final results, of course, just for curiosity and sometimes it is very, um, rewarding to have like an, a sort of an outside view from the project. So for my curiosity and for speaking for all of the partners because we do this kind of, uh, um, interviews. Right quite frequently. Um, but we also would always ask if we can have the final product.

Interviewer: In there is a time for the university in June and July we could defend our thesis. The final result could be for me also the text, which I would like to share with you if it’s acceptable. And also, yeah, for school, of course. And I try to make somehow some kind of documentary. but I will show it in my thesis defense. And also, of course, I will send it to you with my thesis, which would be also helpful to see other people’s ideas. Normal people and architects in Berlin I mean. And also, yeah, the offices that contribute to this project.

Mr. Machleidt: Yeah, Yeah. Thanks a lot. Good luck with your studies. And the final question for me. Have you visited? Have you visited the site or will you visit the site?

Interviewer: Actually, I go there to see “Haus der Materialisierung” because the other part of the site is under construction. Um, so I have talked with the people. So there would be potential to go and see the process. Uh, also in the winter, maybe it would be hard to communicate with the people. Maybe one month later, two months later, then, the weather would be better. So I would like to have an interview with them on the design side. Show them the idea. Yeah, I know because I would like to know what goes on in the social part and I try to make a way to add some value maybe in this part.

Mr. Machleidt: So, um, then maybe a last tip concerning the architectural part. In Berlin, which is, um, um, an architectural board tasked to, um. Uh. Get basically discussed the architectural approaches and designs of the collegium and with "statistics" we have been to the Collegium three times. Four times. Um, and so, uh, and they, they have very, um, very interesting protocols from those meetings, for example. We talked a lot about the new housing projects from the VBM. What we didn't talk about was the projects from the initiatives themselves because they have three. Three building sites as well. Small properties, but nevertheless. Uh, and they're in the center of the "statistics" from, from surrounded by on the, on one side administrative uses and on the other side the housing units.

The very, very exciting approach of Reusing parts of materials for their new building. So basically speaking, the three ground floors are made up by the construction of the existing building, and then you put new three new floors on top. And since we are talking so much about environmental care, and gray energy reuse, that makes it perfect fitting, in my opinion, for the site. So since you are free from the financial aspects of it in your design. It's a thing to look upon.

Interviewer: Did they have any website or maybe?

Mr. Machleidt: Even has a website? Yeah, it's from the Senate Department of Urban Development. Uh, I doubt that the protocols are available in English, but the pictures will be more than enough for you to get inspiration. Seems that your professors will like it.

Interviewer: Of course. Of course.

Mr. Machleidt: Thank you so much for your curiosity and good luck again.

Interviewer: Thank you.

## **Interview Information:**

**Name:** Sascha Nagel

**Gender:** Man

**Age:** 40-50

**Personal background:**

Team Leader Property Management

BIM Berlin Real Estate Management GmbH

**Interview Date and Duration:** 23.01.2023

**Interview Setting:** Online/ In person

**Interview language:** Deutsch

**Location:** Keibelstrasse, Berlin.



Interviewer: Could you tell me what was the role of the people in this project in Participating?

Mr. Nagel: Well, maybe we can start with the basics. So the House of Statistics is a property that we as BIM, i.e. Berlin Real Estate Management, bought many years ago. It was empty. Then the state of Berlin took over and the state of Berlin is represented by us, by BIM. Then this house also stood empty for many years and there were considerations, What will happen to this property in this location? And then the decision was made to renovate it. However, the special feature here was It is not a renovation, as we usually do, but we involved the so-called city society here. So that means that if we used to build earlier, then we prepared these areas for office use, office use that stands in an administrative context, i.e. for public administration, tax offices, whatever comes in there. Here, however, the requirement was that we integrate the city society. And that's why a rather complex situation has developed here. We are not only involved as BIM, but there is also cooperation, which is made up of various protagonists from civil society. So, here a so-called socio-cultural use is planned in parts of this building. We have, when we see this building, we have several components and we have about 1/4 of them for these uses that are in this socio-cultural context. That means I can't even tell you what's happening there, but in any case in this area it's not the state of Berlin that is the user, but I'd say this association or this association of several parties. Art projects, social projects, etc. will certainly take place here in this part. The other parts of this building are also regularly prepared by us through our company.

Mr. Nagel: The tenants are mainly the tax office in Mitte and we ourselves. We'll move in there. And accordingly, an invitation to tender was made and we are currently in the process of implementing these construction measures. These construction measures have been going on for almost a year and will then take about two years. A year and a half, two years, it depends. Then these premises are ready for occupancy, so that these moves can also take place with the parties mentioned. We not only have the existing "House of Statistics" here, but the whole area is being developed. But we are not involved as BIM, there is also the WBG. This is a housing cooperative that will operate here. That means there is a lot more going on in this area than we are currently doing as BIM. We are just renovating the existing building, so with completion in 2024. And, as I said, the areas that are subject to socio-cultural use go out of it, where it is claimed that the timetable. We have already done preliminary work there, we have carried out a gutting of the property. This man of this building, we've removed the pollutants, etc., so we're now in the remodeling process. As I said, we advertised there. We're talking about almost €200 million that will be installed here. And these construction measures are being carried out by a working group at the moment. That's the way things are. Quite roughly.

So you can see what's planned here. So, that's looking good. I'll share the screen for a moment. So if you see a slide here, brief orientation. Here this building area, starting here in front. This is what you see from Alexanderplatz. Where this lettering is at the top. Everything different. Number one is on it. And this bar. Here. This is stock. This building is standing. It's just the shell that's being built. These areas are the ZKB initiative. They are just emerging, they don't even exist yet. We don't build them either. We as Bim really only deal with this complex here. And these construction measures here? We're talking about a time horizon. I don't know about. About ten years. In ten years it will look like this. Like that? And as I said, as BIM we are responsible for this complex here. That was for guidance only. And this complex. Now it's the other way around. Here, this is here again. This front view from Alexanderplatz with this transverse building. This is the building we are currently building in. Here we have the use of the BIM. So, we're bringing blue here again. The green is the tax office. And here this orange red part. This is the so-called socio-cultural use. So this association, which is made up of various protagonists of urban society. We don't have much to do with that now. We have a shell here and this shell will also be expanded via the so-cu socio-cultural use.

interviewer: And about sustainability and maybe ecological things. That you might think and consider in drafts. Maybe you could tell.

Mr Nagel: We have. Well, that's the plan. We have provided the following here. Basically, there is a photovoltaic system on top of the building. There is also a heat pump center here. We have the special feature here that we do not regularly draw the heat transfer medium from the air or from the earth, but from the waste water. I don't know if you've heard of this before. We have one here. sewer. Let's see where we can find it. Here, This is this sewer. It is located under Karl Marx Strasse. So. It has a diameter of one meter 80 here. A heat exchanger goes in here. And from this heat, which is in this waste water, we draw the heat for the building. We are represented here mathematically. Here you can see the channel. Here. That's where the heat exchangers are. Here, the heat exchangers. The number is not in my head. I think about 100 meters long each. And so we draw the energy and pack it here in the heat pump control center. We have several of them. A control center is here in the front part of the building. One center tract and one is back here. That is first of all the supply, the basic supply. And we will continue to be involved here with a local heating system. This is the basic supply of the building. With the photovoltaic system we will not be able to supply the entire area of the building here. Supported temporarily, of course. This is very roughly in terms of sustainability, what we have planned as an energy concept.

interviewer: Das konnte komplex sein, dass diese Arbeiten miteinander und auch interessant sein.

Mr. Nagel: Heute haben. Das sage ich jetzt nicht. Ganz verstanden. Welche Informationen sollen ausgetauscht werden? Da helfen Sie mir bitte mal, Ja.

interviewer: Vielleicht in Ideen, vielleicht in der Nachhaltigkeit. Ich glaube Sie sind für mehr aktiv in die soziale Teil und vielleicht haben Ideen über diese Funktionen vielleicht jeder Dinge. Das könnten Ideen über diese Gebäude sein. ich möchte über diese Dinge wissen will, weil wir. Wir denken über in Universität. So I don't know if I'm describing it correctly, so we. Building Yes, self-sufficient here in this building complex that I just sketched. This is our construction site there. Of course we set them up according to our building regulations. That is our task, which we do here in our area. We are here at Deutsche Bahn in the area of property management. That means we do the management of the property here. Well, and these topics always have a technically pragmatic connection. Perhaps we can briefly go into the office structure again. We work here with a desk sharing system. We already have the same system in Kaiserstrasse, right where you are. So it's the case that we no longer have permanent jobs because we have more employees than we have jobs. Basically, when we move into the "House of Statistics", we ourselves as BIM, there are about 1000 people in the company. Well, we only have around 800 jobs in total. That's why we had already thought about this working model before, i.e. now. We ourselves are already working as pilots after desk sharing and will also transfer this here in the "House of Statistics" to see whether anyone is in there. I'll call it before uh. Well, you see relatively little here. Well, that's not shown correctly here, so. Alright. You know desk sharing models. We have an open space area with appropriate work surfaces and workstations. We are a maximum of eight men in a unit, who sit down there. And after that we have a spatial separation so that we are not disturbed by others. So that's the structure for now. There is now no synergy with the other users. So the tax office works for itself, we work for ourselves and the socio-cultural use works just as independently. We have a couple of surfaces that overlap. We're in that area here. There are meeting rooms in the basement, which can also be used by third parties. But other than that, everyone makes theirs so basic. Here you can find the idea.

interviewer: And current situation in this building?

Mr. Nagel: The current situation? Looks like this, and that's how it looks right now. So pipe working. Everything will be dismantled and then the preparation will gradually begin. That is now. This is what it looks like. A classic construction site.

interviewer: Thank you for sharing this information. Interesting.

Mr. Nagel: Well, if you're there. How long are you still working on the topic?

Speaker2: My thesis We're trying to get this information. And think what could be interesting? We think about material. About the history of everything. That could also be interesting. Topic ecological maybe reduce CO2 in Software Bim Software. And on the other hand We try the experience that residents have, have this information and then decide what could be interesting.

Mr. Nagel: So this saving of CO<sub>2</sub>. Of course they are calculated. Yes, so if there is interest, you can certainly derive the numbers again and also the topics related to sustainability etc. We can certainly pick this up again from our specialist departments, because we really have departments there that deal with these key issues of sustainability, energy saving and so on. And the actual implementation of this measure is also carried out by another department. We also have a construction department in our company that is responsible for the implementation of the construction project. Therefore, if information is needed again, we can ask for it again if you want it or make a separate appointment, but that would not be an issue. If there is still information missing and you would like to have us there, then we can do it.

interviewer: that would be very good. yes if you have information

Mr Nagel: Yes. Then just give a signal. It's not pending at the moment, but we're just preparing the issues that will later be necessary in management, so that we're also in the picture. And we also know what to expect afterwards. But all the facts, energetic considerations, we as a company don't have them ready at the moment.

interviewer: That would be great. Yes. Well, I'll send an email about the dates and other things. And yes, for me it is very, very interesting that these can be helpful.

Mr. Nagel: Yes, with pleasure. Very gladly. Yes, okay. And then we have it.

interviewer: Yes. Thanks. Excellent. Yes.

Mr Nagel: OK. Well, first of all I'll say that sincerely. Thank you for the interest. And yes, just let us know if something is missing. Yes, until then I wish you all the best. So good luck.

## **Interview Information:**

**Name:** Lars Krückeberg

**Gender:** Man

**Age:** 50-60

**Personal background:** Graft GmbH partner

**Interview Date and Duration:** 23.03.2023

**Interview Setting:** In person

**Interview language:** English

**Location:** Invalidenstrasse, Berlin.

Interviewer: First, I would like to start with a general question about the building. Um, how did you determine which type of feature you consider to be special for the Berlin? I'm referring to the particular aspect that stands out to you. Which feature specifically? Okay, yes. I'm interested in the aspects you find unique. I don't want to delve too deeply into the architecture at the moment. Instead, I'd like to hear your thoughts on the social aspects. Perhaps you can share any special features that make you associate Berlin with the city's character and on the other hand your office in Berlin.

Mr. Krückeberg: We began our journey in Los Angeles, but when we considered returning to Europe, it became evident that if we were to come back to Germany, it had to be Berlin. Berlin stands apart from other European cities, particularly as the capital of an industrial nation. It became a capital relatively late in history, as Germany itself became a unified nation quite late compared to countries like Spain, France, or England—specifically in 1871. Geographically, it is situated more towards the eastern part of the country rather than being centrally located. Furthermore, unlike many cities that grew around a castle, Berlin's development did not revolve primarily around a castle, despite the presence of one. In fact, the Prussians always held a stronger preference for the castles in Potsdam rather than those in Berlin. This makes it peculiar that we have reconstructed a castle that was no longer in existence and wasn't particularly favored by anyone. Nevertheless, Berlin has a rich tradition of being a city for outsiders, welcoming newcomers and those who left their homes in search of opportunities and fortune elsewhere.

In this regard, Berlin has always been and continues to be a highly modern city. It embodies a sense of being an "American" city in many ways, characterized by rapid growth during the period of its founding when Berlin became the capital of Germany. It has consistently attracted individuals who could forge a livelihood here and seize the opportunities available. This tradition remains an integral part of the city's identity today. Berlin stands in contrast to cities like Munich, Paris, or London. Unlike them, Berlin wasn't always a bustling metropolis. It was initially a significant central hub that experienced rapid growth later on. What set Berlin apart was its openness to people from all walks of life. The city has a historical tradition of welcoming newcomers, exemplified by Frederick the Great's invitation to Huguenots from France. This openness fostered a mindset of tolerance, both in terms of diversity and religious beliefs. Consequently, Berlin has always been a magnet for individuals seeking new opportunities.

This distinctive characteristic continues to shape the city's identity today. Berlin's self-consciousness differs from that of cities governed by dukes and courts. Instead, it is rooted in the collective experiences and contributions of those who came to Berlin and made their mark. As outsiders who have been in Berlin since 2001, my partners and I have embraced the city and become Berliners, despite not being natives. Berlin is the kind of place where one can arrive without fluency in the local language and still thrive if equipped with a great idea. However, Berlin's development has not been without interruptions. It faced significant setbacks, including severe destruction during World War II and subsequent division. These events left profound wounds on the city, punctuating its history with periods of hardship and recovery. It's a city that always at one point overcame problems. And these wounds were then open spaces that could be filled with new ideas and also that have a tradition. So that was the case after the war in West Berlin, partly in East Berlin. And then all of a sudden, we overcame the biggest wound that we had, which was the Berlin Wall. And suddenly, in a city like Berlin, in the European industrial capital of a nation, you had all this free space where there was a death zone before, and all history there had been completely eradicated. There was no sense of history in this space. And to have this as a free space attracted a lot of people because there was a certain freedom associated with that. If you look at music, you know, Berlin in the 20s, you know, Berlin in the 50s, Berlin. After the wall came down. The 90s was a great place for young people and people that loved music, and it was international. It was techno, the music without words, where the music is the communication itself and it's for everybody. And that took place if you make a list and we once did for a biennial we did in Venice, we researched exactly what happened after the wall came down in this death zone that became free space. If you mark all the best clubs in Berlin, it's the former wall being shown on the map. So young people came here, young people from all over Germany, all over Europe, all over the world with a good idea because there was free space and there was an openness to do it. And that freedom of mentality and accessibility to a city that is unique to Berlin, that's its big advantage. And that's why a lot of people come young people, and they leave some of them to leave eventually. Some stay forever. But it's this flux, this continuous swell of new ideas that makes this city so, so special, so less and less space. So by now, the wounds had been filled more and more. But it's still we have so much space still that we can use compared to London or Paris. And yes, it's getting more and more expensive to live here, but it's by no means as expensive as it is in other European capitals. So it still has with all its trouble and all its problem, it has still that promise of, yes, you can break the mold here, you can break in. It's an accessible city. Really. That is why Berlin is unique.

Interviewer: Perfect. Um, as I understand, I would like to begin with this concept and move on to the next question. This concept revolves around the social gap in the city, which makes Berlin, in your opinion, so special. It's a combination of all the factors we discussed earlier. When we delve into the realm of architecture, it becomes crucial to consider the city itself and its unique attributes. I'm referring to the larger scale of architecture, not just the small scale. How do you perceive the distinct aspects of Berlin that have the potential to shape its architecture? I comprehend that this combination is rooted in the city's social dynamics. It involves diverse people with ideas in their minds who aspire to fill gaps, such as in music and various other areas. So, when we approach architecture, particularly in the context of the gap between the two sides of the city, how do you believe this concept can be reflected in architectural expressions?

Mr. Krückeberg: Interestingly enough, Berlin markets itself as the city of freedom. As mentioned previously, when a city is divided with a space in between that becomes free, there are endless possibilities. It is worth noting that when the wall fell in the 90s, Berlin elected a conservative Senate building director named Hans Steinmann, who set narrow boundaries for the city. However, the spirit of freedom still thrives in hospitality, music, fashion, and other innovative and youthful concepts. Berlin has rightfully earned its title as the startup capital of Germany. In "Berlin Eine Stadt Schicksal," The Destiny of a City," written a century ago by Carl Scheffler, the city is described as unfinished and unattractive before World War I. Berlin is known for its last sentence, which symbolizes a fundamental punishment: it is a city that is always in the process of becoming and never reaches a final state. This aspect serves as an advantage for the city. As mentioned earlier, Berlin is accessible and continually progressing. It embodies the essence of the modern world, where established and wealthy areas often struggle to accommodate innovative concepts and resist change. That is indeed the case for Berlin in terms of architecture. Interestingly, with the influence of Hans Steinmann, Berlin took a sharp turn towards conservatism. During that time, one of the notable competitions was held for the redevelopment of Potsdamer Platz, in which Rem Koolhaas served as a jury member. However, the winning design by Sattler from Munich and Rem Koolhaas himself was perceived as traditional and conservative, featuring certain height limitations, district restrictions, punched-in windows, and stone facades. Rem Koolhaas even expressed his dissatisfaction, stating that he would never set foot in the city again and refused to build there. However, as we know, he did eventually contribute to Berlin's architecture, 20 years later. The prevailing idea at the time was to reconstruct the city as it was before, raising the question of when to start this reconstruction. Should it begin in the 90s after the fall of the wall? Should it go back to the 50s or even earlier, before World War Two in the 30s? However, the Nazi era during that time is considered a dark period. Ultimately, the decision was made to go back to a seemingly better time before World War One when everything appeared prosperous, and Germany had a Kaiser. For us, Berlin is incredibly attractive because it is not just one Berlin. It represents the coexistence of numerous Berlins, each with its own distinct structures and ideas. This diversity is what makes the city so exciting and truly unique. For us, Berlin is incredibly attractive because it is not just one Berlin. It represents the coexistence of numerous Berlins, each with its own distinct structures and ideas. This diversity is what makes the city so exciting and truly unique. There isn't just one style for Berlin. However, the decision was made, at least for the central part of the city, to pursue a more conservative approach. As a result, the architecture became quite mediocre, lacking distinctiveness and resembling the generic European aesthetic. This raises the question: what exactly defines the Berlin style? When visitors and architects from abroad come to Berlin, they often express their excitement to be in a city known for its innovation and youthful energy, where possibilities abound. However, when asked to showcase remarkable architectural sites, we can only point to a handful of notable examples such as Daniel Libeskind's Jewish Museum and Frank Gehry's bank. While there are indeed good buildings in Berlin, they have yet to reach a world-class level.



The city's proclaimed freedom has not fully materialized in its urban planning and architecture. Instead, we find ourselves in a situation where castles are being reconstructed, symbolizing a feudal era and a ruling family that played a significant role in triggering World War One. It's a peculiar situation. Perhaps it's also the architects' responsibility to present more ideas and visualizations of a promising future that can counterbalance the longing for a specific kind of identification. This longing stems from people's desire for a sense of belonging in a country and a city like Berlin, which experienced such brutal destruction. So, we think it's okay if you build a castle and, you know, conservative architecture here and there, it's all okay. The good architects, their very good colleagues that have built here, and I would always argue that doesn't matter what kind of style, if it's good architecture, it will bring identity and will bring the city value. The problem is when it becomes dogmatic and especially for Berlin, you're saying this is how we have to do it. This is the only way we should build in Berlin. That's where it becomes problematic. That's why. Yeah, I wish there would be more courage here. There would be more freedom here in understanding what the real core identity of Berlin is, which always is juxtapositions, fusions, hybridizations, you know, process differences. You know, the city lives off that. That makes it special, not because it is a perfectly built Renaissance city in Italy. So that is different here. And yes, we're trying to bring in sometimes new ideas and ideas that might be not even provocative but give another idea to urbanism. That is what we think is central to Berlin. So, and we have succeeded in many ways here and there. But it is a struggle where you would think there shouldn't be one given that this is the city of freedom, but in architecture, it's still quite conservative.

Interviewer: that's great. I appreciate the points you made about Alexanderplatz and its importance in Berlin. I would like to understand the specific features and aspects that make Alexanderplatz unique and how they could be connected to the concept of the gap you mentioned. Additionally, I'm interested in exploring how Alexanderplatz functions within the city and what potential role it could play in the future. Furthermore, I'm curious to know if there is a tangible connection between these ideas about the future of Berlin and what potential opportunities you envision?

Mr. Krückeberg: Well, the Alexanderplatz has a long history of, of great architecture. In our great brick architecture from the foundational 19th century. There was the Roterberg, the Red Castle, where the police were sitting, and the central headquarters for the police that is destroyed these days. And Peter Behrens built his iconic structures there that were so modern for their time. And then you have, you know, the icon of today, the TV tower that the GDR built. I still think it a fantastic idea to build a TV tower right in the center of the city. And it's beautiful. It's simple and accessible. It's a place of the dynamic of a lot of transformation throughout the years. And I think it will continue to be that way as it is a crossroad of S-Bahn and cars. It always was and always will be a center of dynamic transportation needs. When there's transportation and change of transportation, there is commerce. You know, there's trade. So, it will always be busy. It will always be special. So, the decision in the 90s to build high rises there very early on, it's a big decision. Berlin was always hesitant to have high rises, even though they are everywhere already. Anyway, there was decided to do that, and I think it was the right decision.

That's another of these iconic moments in the city where the city took, again, a right turn into conservatism in a place that above all others, is so dynamic. The competition was when we almost finished our studies, we closely followed the competition that took place at that time. The first prize was Hans Kollhoff with a design of towers built on blocks that are not even Berlin. It's a typology found in America, especially in Chicago. And he claims that. So, the question is for me, if you claim to build for Berlin in a Berlin style, why would you build something that looks like Chicago? Even though, as I said before, in a way, Berlin is like an American city, stylistically, it doesn't mean anything. So that is an important thought, an important idea. Just like Las Vegas is importing Venice or New York into casinos to create identity. It's not wrong, you know, it's just debatable if that's the right decision. The second prize was much more interesting in our view. The second prize was Daniel Libeskind, and of course, he had skyscrapers, but he had a variety of buildings and styles, and above all, his urbanism left space for future development. We cannot predict how the world will be in ten years. The pace of change is accelerating, and urban planning should account for that. It is important to leave room for other architects and professionals to address future challenges and provide solutions that we may not be aware of yet. The notion of "knowing everything" and imposing a single architectural style on such a dynamic site, representing diverse people, is somewhat arrogant and limiting. It halts progress, as we say in German. From your perspective on the world, it is clear that this project will be realized despite encountering various challenges in terms of foundations and other aspects. While the volumetric study may be sound, I question the imposition of a fixed architectural style and the idea that one architect knows exactly how the future should look for Berlin. This approach does not align with good urbanism. In today's cities, it is crucial to embrace a more inclusive approach that moves away from the concept of a "Starchitect" who claims to possess all the answers.

Interviewer: Old fashioned modernism.

Mr. Krückeberg: Yeah, it's old fashioned in a radically changing and dynamic world. And maybe we have to rethink that.

Interviewer: Perfect. Now, let's consider the significance "Haus der statistik" and their role in the Alexanderplatz. Additionally, I would like to refer back to the social aspect you mentioned earlier, as it plays a vital role in shaping Alexanderplatz's identity. Furthermore, we should also discuss the potential future of this location, considering the plans for redevelopment and the available space that holds immense possibilities for new construction.

Mr. Krückeberg: "Haus der statistic" are very interesting. It's amongst all the new skyscrapers that are going up now that would look like Chicago in the 30s. This building will look newer. Interestingly enough, there are a couple of other structures. I'm not so sure how many of them will survive. Probably not that many. Some are protected and put to use. But now "Haus der statistic" remind me a bit of, you know, the comic book Asterix. You know, this last building standing where a lone building stands defiant against the Roman Empire), it's fighting against the Roman Empire and will never be. Anyway, I think it's great to have a space that's exactly, I think where Berlin excels if there are people that occupy spaces, not illegally, but I have an idea for this, and it could work. Can we talk about it? And this is what happened in the building as a platform for Urbanistic ideas. If you don't have an idea yet what to do with it. Give it to thinkers, to urbanists, to artists to do that. And I hope it can establish itself as a use Regarding the future of Berlin, I don't know too much about it in terms of construction. You know what the value of it is in materiality, in structural engineering that I don't know. But as a laboratory, an urban laboratory, it already was put to use for a great idea. So, I have a good friend that I had the pleasure of being with at the Villa Massimo in Rome. Eric Genrich. And he's an architect turned artist who is doing exactly what should be done with such the spaces, rethinking them, taking action, inviting people, doing performances, and creating spaces, temporary urbanism. So, they already made history there. They're already brought extra value. I hope that continues this kind of approach since could be a center for ideas into how to use. You know, buildings that are not easy in the city fabric, but especially in this place, it should be used as an innovative laboratory and not for luxurious apartments or just another office building. We already have enough of these.

Interviewer: The point that I believe they are trying to implement, as you mentioned, is truly necessary in Berlin. From my understanding, there are two owners of the building. One of them operates a special office related to the building, while the other has constructed something that provides ample space for artists and various functions. They aim to offer the building as a useful platform for people to engage with. In terms of architectural changes, I would say there isn't a significant difference in the building's appearance. However, the big, notable change lies in the concept of giving space to the people. It appears that they have planned and considered the importance of utilizing reclaimed materials and providing a space for individuals to contemplate and engage with the building. This connection between giving space to the people and involving the users is truly intriguing and holds great potential.

Mr. Krückeberg: It is. Joseph Boys used a great term for some of the work that he's done social sculpture that place is like a social sculpture and it's dynamic. It will always change because it's not about style or architecture. It's about programming and what people can do within architecture, much more important. So yeah, I think it's a great project.

Interviewer: Yes, I agree. By adopting a conservative approach and preserving the building, it can serve as a tangible representation of people's ideas and aspirations. However, it's worth considering the possibility of providing even more space within the building. Expanding the available space would allow for greater flexibility and accommodate a wider range of activities and creative endeavors. This could enhance the overall experience and potential of the building as a platform for urbanistic ideas and artistic expression.

Mr. Krückeberg: Well, this is the moment where the city itself claims, you know, we're Berlin and, you know, you can't always wait for private investors to do this, the city as well as to put their skin in the game, meaning put some money down. They have to help there.

Interviewer: Yeah, and also, regarding the last question, I would like to know if you have any examples. It would be really interesting to understand how Graft has a role in this concept, as you mentioned, both in terms of the social aspect and filling the gap in architectural style. Anything that could play a role in Berlin as a cutting-edge office that aims to bring about change or create a space that promotes good architecture.

Mr. Krückeberg: Well, there's no one answer to the question. There is no one answer to different projects. No, it's a very different thing from what we did here in the States. You just fill a gap with a house where people live and there's a retail in the basement. Classical houses, you know, which had to have punched-in windows. That's what we did, I think, a special facade and architecture there. It's kind of a split-level thing. So, we created more square meters because living rooms are bigger where you entertain people and people come together as the bedrooms in the back. So, and the split level anyway, there are many solutions to different things for ten years. We're doing bigger projects here, which always have the potential then to change an entire neighborhood or quarter of the city. That's or, you know, not a quarter. How do you say that? It's a building block for living where you define not only with the architecture but with your programming, what happens there and how people use it, and how it can change in the future. So, it's resilient. I think we're doing this in many, many different ways. So, we always start by looking at what is at hand, what is our context, what is the history, and Where should this go into the future? Who do you bring to the table to make this work as a functioning, robust urban organism? And then we apply architecture that plays with its neighbors.

You know, there's a new kid on the block. Sometimes a new kid becomes, you know, the block. But there's always context. And, you know, for this particular project, everything was built with bricks from the 18th century to the 20th century, and everything was preserved. So whatever we added was, of course, made of brick. It's just done in a different way. The way you can use bricks today is if you have a computer and you can do amorphic shapes that, then have a certain idea of how to mitigate because it was a protected area between two different neighbors.

So, you fill the gap with a certain intelligence while. Using the identity that you find and continue the narrative. That's what we do. We never go against the character and the spirit of the site. We always try to take it very seriously. And whatever force is already there, you know, it's like it's like martial arts. You know, you take that force and don't go against it. That is our idea. How to work with that. Then there are possibilities where you know that you can only play for a summer or winter. Meaning its temporary use. We've constructed various types of buildings, including temporary structures such as offices, art halls, exhibition spaces and a restaurant using container architecture. These containers are designed to be easily relocated outside and still function effectively. Alternatively, if it's more cost-effective, they can be disassembled and removed. The simplicity of disassembly allows the container to be reintegrated into the cycle of life. So, you bring value and usage and business to a site that otherwise is unused. And that is something that, that Berlin is a great place to learn and see. And we're happy to be part of that innovation to have temporary uses to rethink areas where he thinks, well, we did a container building pop in one of the most expensive sites in the city, and now it's a bunch of shiny containers. That is a platform for urbanistic talks or parties that is used, you know, because it can create extra value for an investor, but it also creates extra value for all the neighbors, for the cities itself. We've done entire concepts with this idea of the pioneering ideas that then change a big discussion we have today again as Tempelhofer Feld. Back then there was the first competition to think about the northern part and we won the competition. Then they have never acted on it. Never, ever. And now, you know, because of bad communication, in my view, and the wrong questioning, the people decided, oh, we can't build anything on this giant grassland. You know, it's not a wasteland. It's grass, but it's not a park either. So given the situation that we're in desperate need of space that we can build and if the city-owned space, it always starts with the ground. The ground price is too high, you know, nothing will get built. Nobody will because you can't make money. Then the city must do it themselves. And they're not doing it either. It starts with the ground. If you have a ground that you can give a bit cheaper, everybody can build living areas for an affordable price. So, I think we have to talk about it because it's a giant space. I just read the other day, well, we would never think about, you know, building into the Tiergarten. Well, they did, but that is the 50s and 60s, the Hansaviertel, which is a huge success today. Anyway, I would not just, you know, bite into the Tiergarten again, but the Tiergarten is a park. It's very different from just, you know, a meadow or let's say. Plus, it's gigantic and we need the space. Anyway, we won the competition there, and that was the idea of going in light. Everything that's there already, you know, all baseball fields from the alleys that had their places there. You use all that, give it to the Berliners, because that's what they do best. You know, do your things, a little bar club, whatever. And that is, you know, like an activity in a park. Then you start building around it. And once it's done, you take the pioneering efforts out and then this becomes the mini park for the structure itself. Anyway, you can create process thinking in urbanism. I think you still have also time to adjust and adapt while you're, you know, building. If you think you can build an entire area in a couple of years and design everything, it's difficult. So Processual thinking in urbanism, I think is.

And then that's what we have done there. We still think it will work well. And again, as I said, it starts with temporary uses. And then, you know, you frame these uses and all of a sudden, these users then become the park or the buildings that they are erected. So, I must confess, we love Berlin for this kind of versatility and many parts that is still possible, especially in the temporary things, because nobody is outraged because, well, they will go away at one point. That's why we did, I think, a wonderful design for Kunst Hall on the Schlossplatz because everybody knew that it would take some time before the castle will be erected. And we wanted to use this and brought it through the Senate. And there was a great idea. In the end, they built something else. We pushed it through. Politically, it would have been a much more interesting building. But anyway, this is possible. And we learned that here there are other cities that. That kind of mimic or makes you think there is something in the process. So, you know, because that's value, things are changing, always changing for the better. Las Vegas is the best urban storyteller in the world and people look down on it, but they didn't understand the techniques. We're not talking about style. We're talking about techniques and the human condition. And humans just love new things. Oh, something is happening here in Vegas. You always see a construction site in some of the casinos. Oh, something new will come. I have to come back. And that's Berlin. That's why this last phrase by Carl Scheffler in this book, is a city that's always becoming never really is. Yes. That's fantastic. So temporary things are sometimes really good. And when you do them right, sometimes the temporary things stay forever. But then they stood the test of time, you know, they delivered anyway.

Interviewer: I get pleasure much more than recording and I also find the discussions and insights you shared quite fascinating. Thank you.

## Interview Information:

**Name:** Sven Fuchs

**Gender:** Man

**Age:** 40-50

**Personal background:** Graft GmbH partner

**Interview Date and Duration:** 25.01.2023

**Interview Setting:** In person

**Interview language:** English

**Location:** Heidestraße, Berlin.

Interviewer: Our first topic is Berlin. What are your thoughts? Berlin stands out from other cities and possesses a distinctive character that sets it apart as a city first. Then, let's delve into the discussion about designing for the new. Specifically, how does this uniqueness, the fact that it is a special city, impact the design process?

Mr. Fuchs: Okay. What makes Berlin special from an architect's point of view? Is Berlin special because of its history? Berlin is not the only city with such a history of being divided between East and West, but Berlin as well as compared to a European standard, one of the youngest capitals of the whole continent. And this makes Berlin special. The two ways. One is Berlin has no track record like most European cities, which is leading back to the Roman Empire or more than 1000 years in the past. Berlin is relatively young, only about 770 years old, and to be fair, before it became a viable part of Kurfürstentum Brandenburg, Prussia, it was a very, very small assembly of very unimportant buildings and had no impact at all. So, this changed massively with, first, the Constitution of the Kurfürstentum Brandenburg, later with the Prussian Kingdom, and finally with the German Reich, where Berlin became the capital. And this is parallel to the Industrial Revolution, which was a little delayed on the continent compared to England in those days. Berlin had one massive group and 2. Berlin, as we know it today, is approximately built between 1870 and 1930, which makes Berlin a Dubai of this period in the world. And well, all this. Absolutely out of map becoming very fast. Very important. Being divided, reunited, and still under construction makes Berlin special in the European context of all big cities, as well as of all capitals in Europe.

Interviewer: Perfect. So, do you believe that considering each as a separate entity is important? We have significant experience in Berlin, and I believe the crucial aspect to focus on is the diversity present in the city. Naturally, there are numerous opportunities, but it's important to acknowledge that being a new city, there may also be challenges and potential issues. One of the primary concerns could be social in nature, relating to the rules and regulations of the city. Additionally, there may be unique architectural considerations that need attention when designing and constructing buildings. Regarding Berlin's overall development process, starting from its historic foundation and progressing through subsequent building phases, it is indeed a special undertaking. The historical context and the ability to build upon it offer a unique dynamic for architects and designers. What are your thoughts on this?



Mr.Fuchs: From, as I described before, from the historical point of view, but as well always looking into it on a city scale. Berlin was. Since the reunification was special because it was different than other European cities and was different from what had been discussed amongst architects before. Berlin was not an archipelago, an archipelago of different design strategies and buildings, but Berlin was an archipelago of gaps, areas, actions, and opportunities. Everywhere in the city doesn't matter if west or east, but yes, of course, with a little focus on the east, you found still there. Potential scars telling stories from the Second World War. But in fact, all those areas became zones of opportunity or another very important thing. This gap of separation was the former area of the Berlin Wall, which was not a thin red line, but a wide gap as described in the Great Exhibition Unbuilding Walls. This area as well was not only a gap but a long area. Different spaces are connected zones, all full of opportunities, starting from the edge of the town and leading directly into the center. So special in Berlin was this situation, this archipelago of chances, this trip, this former wall area, and this is today nearly fully occupied only on very rare occasions. You still have those spaces of opportunity. Now Berlin changes and is dealing with the same development risks and strategies as many other cities in the area where we are here. This Graft and Heidestrasse, are still in Heidestrasse. Here we see a former railway industrial zone which is out of use today and is now being redeveloped into a vital part of the city. But this development or such developments aren't special. Berlin. Opportunities with this are Berlin in history and comparison, like in all other European cities which were transferred from an industrial age to something different in the future.

Interviewer: And with regards to zoning, as we open up the conversation, it is important to focus on areas like Alexanderplatz due to the unique circumstances it presents. Alexanderplatz holds a special position and can be considered as a distinctive case that requires special attention.

Mr.Fuchs: From my point of view, Alexanderplatz has. And a special place in this context, as I have described it before, Alexanderplatz is, on the one hand, was, on the one hand, the true center of Berlin from industrialization, the densest point where many different tramways, subway, S-Bahn railway, everything came together at Alexanderplatz. It was a true business center. Before the Second World War, after Second World War, it became the climax, the center of all the socialistic ideas of master planning, design of cities, and sociology aspects like how the socialistic city should be. This had been really, really put to the absolute last. Piece of stone in the ground. Everything had been transformed into this. Starting from Alexanderplatz going down Frankfurter Allee to the east. This whole area had been completely transformed. As an example, as a lighthouse for socialistic design, socialistic ideals, as it had been such an ideal for the German democratic republic. It is exactly the other way around. Today, so many different strategies and projects are running there. On the one hand, transforming Alexanderplatz and the surrounding areas back to something which reminds me of Berlin before the war with lower buildings, but a denser city, not these blocks in open areas, but street-facing blocks with courtyards.

The whole idea of block and street and courtyard had been learned in an older history of Berlin. But as well, Alexanderplatz is one of the I think had been three centers in those days, which came from the Berlin Light built where they look for developing centers with high rises, one around Zoo, one around Potsdamer Platz and one around Alexanderplatz with different designs, creating a number of towers facing Alexanderplatz and accompanying the Today existing hotel high rise, which is already there. And those plans did not become a reality until today. But nowadays, the first high-rise is under construction whilst on the other corner of Alexanderplatz, while whilst working the foundations of the other high-rise subway had been damaged. And is this whole process now on hold? However, the next transformation of Alexanderplatz is now trying up to a certain height, wiping out the socialistic idea on a city scale, not wiping out the buildings. Many of them are kept under renovation, like, for example, the House of Berliner Verlag. We see a cafe like House. This layers this Congress center and potentially in the future upcoming house. The statistic is the revitalization of these socialistic buildings. But. All of this is accompanied by these high rises with block recreation of blocks and is supposed to be one of the focal points of Berlin in the future again.

Interviewer: Perfect. It's great to see how you're seeking a connection between various aspects in the situation at Alexanderplatz. The complexity arises from the interplay of old plans, new plans, and considerations of both commercial and social perspectives. As you mentioned, architects and urban planners can bridge the gap between these different viewpoints. If we envision this as a statistical poster, seeking to address and resolve the issues or fill the gaps, the role of the architect becomes crucial. how have Architects the potential to contribute significantly to the resolution of problems, and their involvement can shape the outcome? However, it's important to acknowledge the presence of rules, regulations, and commercial interests that can impact the situation. How do you think that these types of social and also commercial things put together, um, could be, could have a connection, could find filling the problems of the gap?

Mr.Fuchs: Around "Haus der statistik". There is today a continuous workshop running this so-called werkstatt is dealing with the interest of many different stakeholders and is trying to incorporate many different approaches, use cases, and ideas into this building. This is an interesting process and a risk at the same time. The risk is always created, for example, from an architect's point of view, from an architect, which is who has not in mind that every architect needs a bow here from the Germans. Taking the German word here, here is not connected to a certain gender. It's if you have a female "Bauherr", then she is called a "Bauherr". master and mistress might be the right translation to English. And this motif of master and architect is not the same motif as master and servant, but it is a motive of two drivers depending on each other to develop a project. Architects cannot develop anything without a "Bauherr". All that architects do without "Bauherr" is not architecture but art.

And this is not a self-feeding animal. You need success for a successful project and successful project. I do mean all stages from the dream stage to design, to delivery. You need a strong pair consisting of a "Bauherr" and an architect. Now looking into "Haus der statistik" is. All stakeholders coming together there are able to consider themselves as born. Architects can coordinate and integrate different ideas into one successful project. But this process of communication agreement and the final design result which has to be delivered, is necessary to be accepted as teamwork. And this is the main risk I see with something like healthcare statistics that it is working perfectly. If it is teamwork and it suffers terribly, as soon as one stakeholder is lifting his vision above others. So. Long. Long talk. Short story. I'm looking forward to this. But I strongly believe in teamwork, in cooperation. And this cooperation approach is one of the main motives in the work of graft and one of the main motives in my interest as an architect, how I try to achieve the best result.

Interviewer: Thank you. I would like to open a conversation about ecology. there is a lot of interest in this aspect. It is a future that many people envision for the European citizen. So, how do you think these buildings could participate? Are there any suggestions for using specific materials?

Mr.Fuchs: "Haus der statistik"? Same. Considerations and for all other projects apply but "Haus der statistik" brings certain benefits. For example, from a point of sustainability, you always need to analyze 3 in 3 steps. The first step is, um. Checking the means or avoid. Avoiding construction is the most sustainable. A building is a building that has not been built. While "Haus der statistik" are already providing a lot of concrete, the whole structure is there. It is, per definition, very sustainable to continue from that point. But this is the first. The first stage, as I said, is as mean or being avoid building. The second step then is to try to be as lean as possible. Give it some time to evaluate what level of comfort is truly necessary, and what number of industrial standards need to be respected in Germany with one of the highest industry standards in the world, those standards have an extremely high impact on construction costs and the construction process. And let's put it that way, not all of those standards or all of the connected levels of comfort are necessary to name one out of many. For example, it is noise reduction, which is prioritized so highly in Germany, set in residential buildings. The dimension of ceilings is no longer mainly influenced by the loads they must carry but by the amount of noise reduction which they have to provide to protect you from your neighbors. Which is kind of nonsense living in a multi-family home. However, this is supposed to be an example because when I said "Haus der statistik" is already there. So concrete is there more than enough? Perfect. Very sustainable from the starting point. The next point would be to be as lean as possible.

This is more difficult because we intend to fix all problems which such an existing building has in itself with a lot of technical improvement. But you need to avoid that to stay lean. And the last step is leading towards the fancy green level, which is the last one, is what you can improve with dedicated technical measurements like for example, very efficient Led lighting, lighting, amount of lighting, which is connected to the amount of daylight being automatically reduced during the day, raised in the evening, all kinds of automated systems which switch on and off lighting, ventilation, heating, whatever in dedicated spaces when people enter or leave. But all those fancy technical stuff is the third level. And this third level only gives you the smallest bit to reach a sustainable level or to reach a level of CO2 emission or maybe even an energy-positive building. This can be achieved by the last step. But this last step, these last means should always be the smallest amount is the most expensive amount needs to be used very carefully. And this is "Haus der statistik". We aren't there yet. We are far away from that. So, let's see where it leads to. But it's the last step. So what is important? Important is mean check. Is it really necessary to build? What can I what I'm able to not to build lean using a small number of efficient tools do not overdesign your building. The last thing is to use high-end technical equipment to get the last bits out of it. In this row.

Interviewer: We give you thanks for your time and also appreciate your focus on finding a smooth transition between topics.

Mr.Fuchs. Thank you.



Florian, M. (2022, June 16). The Expert Citizen: A Change of Perspectives in Participatory Design. ArchDaily. <https://www.archdaily.com/983107/the-expert-citizen-a-change-of-perspectives-in-participatory-design>

MITKUNSTZENTRALE. (2022, January 8). Modellprojekt Haus der Statistik. <https://hausderstatistik.org/pioniere/mitkunstzentrale-2/>

Page, J. (1972) Planning and Protest, in: Design Participation: Proceedings of the Design Research Society's Conference, UK: The Design Research Society, p.113-119)

Lee, Y. (2016, April). Design participation Tactics: involving people in the design of their built environment. Pao Yue-kong Library. [https://www.academia.edu/26066203/\\_Design\\_Participation\\_Tactics\\_enabling\\_people\\_to\\_design\\_their\\_built\\_environment\\_](https://www.academia.edu/26066203/_Design_Participation_Tactics_enabling_people_to_design_their_built_environment_)

Forsyth, L. (2009). Architecture, Participation and Society (First published ed.). Routledge.

Chermayeff, S. and Tzonis, A. (1971) Shape of Community – Realization of Human Potential, UK: Penguin Books Ltd

Tzonis, A. (2000). Community in the Mind. A Model for Personal and Collaborative Design. Proceedings of the Fifth Conference on Computer Aided Architectural Design Research in Asia, Singapore. <https://doi.org/10.52842/conf.caadria.2000.001>

Lee, Y. (2006) Design Participation Tactics: Redefining User Participation in Design, in Friedman, K., Love, T., Côté-Real, E. and Rust, C. (eds.), Wonderground - DRS International Conference 2006, 1-4 November, Lisbon, Portugal. <https://dl.designresearchsociety.org/drs-conference-papers/drs2006/researchpapers/60>

Sanoff, H. (2000) Community participation methods in design and planning, New York, USA: Wiley

Latombe, J-C. (1977) "Artificial intelligence in computer-sided design: the 'TOPIC' system", in CAD systems by Allan, J.J. (Ed), North-Holland Publishing Company, Amsterdam.

Jones, Peter & Petrescu, Doina & Till, Jeremy. (2005). Architecture and Participation.

Muller, M. J., Wildman, D. M., & White, E. A. (1993). Taxonomy of PD practices: A brief practitioner's guide. Commun. ACM, 36(6), 26-28.

Till, Jeremy. (2005). The negotiation of hope.

Jeng, H. E. (1995) A Dialogical Model: For Participatory design : A computational approach to group planning, Thesis (PhD), Technical University of Delft.

Saßmannshausen, S. M. (2023). Citizen-Centered Design in Urban Planning: How Augmented Reality can be used in Citizen Participation Processes. Digital Library. Retrieved September 18, 2022, from <https://dl.acm.org/doi/fullHtml/10.1145/3461778.3462130>

McNamara, C. (1999) General Guidelines for Conducting Interviews. Sage, Minnesota.

Lerup, L. (1977). Building the Unfinished: Architecture and Human Action (SAGE Library of Social Research) (1st ed.). SAGE Publications, Inc.

Sherry R. Arnstein (1969) A Ladder Of Citizen Participation, Journal of the American Institute of Planners, 35:4, 216-224, DOI: 10.1080/01944366908977225

Sanders, E.b.-N and Dandavate U. (1999) Design for experience: New Tools [online], available from: <http://www.sonicrim.com/red/us/pub.html>. [accessed on Dec 2003]

Sanders, E.b.-N. (2002) 'From user-centred to participatory design approaches', in: Design and the Social Science: Making connections. London and New York: Taylor & Francis. p.1-8.

Silcock, D. (2020). AR URBAN: Exploring Augmented Reality for Participatory Urban Design. Wellington School of Architecture Victoria University of Wellington.

christina petridou | designboom. (2021, July 30). interview with francis kéré on his distinct earth-building technique. Designboom | Architecture & Design Magazine. <https://www.designboom.com/architecture/francis-kere-interview-abre-a-palabres-07-30-2021/>

Hornby, Albert Sydney. (1995). Oxford advanced learner's dictionary of current English / [by] A.S. Hornby ; editor Jonathan Crowther. Oxford, England :Oxford University Press

Gillis, A. S. (2022, November 18). augmented reality (AR). WhatIs.com. <https://www.techtarget.com/whatis/definition/augmented-reality-AR>

CAAD – Computer-aided Architectural Design – Guide for Digital Design. (n.d.). <https://digitaldesign.aalto.fi/digital-design-workflows/caad/>

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Participation  
budgeting

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## **Participation budgeting history**

In 1989, the municipality of Porto Alegre, the state capital of Rio Grande do Sul in Brazil, started using participatory budgeting. With more than a million residents, Porto Alegre is prosperous by Brazilian standards. The Workers' Party, a progressive political group established in the final years of the military dictatorship that existed from 1964 to 1985, won the mayoral race in 1988. The "inversion of spending priorities," or the reversal of a decades-long trend in which public resources were invested in middle- and upper-class communities, was the foundation of its campaign, which emphasized democratic engagement. The goal of participatory budgeting was to ensure that impoverished residents and communities received greater shares of public spending.

When the Workers' Party won the mayor's office in Porto Alegre, it inherited a bankrupt municipality and a disorganized bureaucracy. During its first two years in office, the new administration experimented with different mechanisms to tackle financial constraints, provide citizens with a direct role in the government's activities, and invert the social spending priorities of previous administrations.

Participatory budgeting was born through this experimental process. In 1989 and 1990, the first two years of participatory budgeting, fewer than 1,000 citizens participated in the participatory budgeting process; by 1992 the number of participants had jumped to nearly 8,000. After the Workers' Party was reelected in 1992, the program took on a life of its own, with participation increasing to more than 20,000 people a year. Participation grew as citizens realized that participatory budgeting was an important decision-making venue. (Shah, 2007).

## Participation budgeting (PB):

With a shared base of knowledge, citizens and administrators can work together from the very beginning when issues are being defined and framed. Citizens need to be involved from the beginning rather than brought in at the end when questions are already framed in ways that are not amenable to open decision making (King, Feltey, and Susel 1998, p.324).

"Participatory budgeting, involving ordinary citizens in the spending of public funds, has been one of the most successful participatory instruments of the past 20 or 30 years. At the beginning of the 2000s, there is hardly an organization or territorial entity which would not subscribe to the virtues of greater civic engagement, at least verbally." (Sintomer and al., 2012, p.1)

However, according to Sintomer and colleagues' definition, five additional conditions must be included (2008):

(1) Discussion of financial/budgetary processes (PB is dealing with scarce resources). All participatory devices might concern financial questions (for example, any participatory process related to urban planning will have an impact on costs if projects become bigger or smaller than previously planned). In PB, however, the participatory process is centrally based on the question of how a limited budget should be used.

(2) The city level has to be involved, or a (decentralized) district with an elected body and some power over administration and resources (the neighborhood level is not enough). In fact, we can observe a growing number of neighborhood funds where citizens can decide about a concrete amount of money, but without having any influence on issues that go beyond this level of a single neighbourhood.

(3) It has to be a repeated process over years. Consequently, if a participatory process<sup>1</sup> is already planned as a unique event, we would not consider it as PB: one meeting, one referendum on financial issues are not examples of participatory budgeting.

1. On the other hand, Shah (2007) thinks that this process might have other issues: Participatory budgeting comes with significant risks. Participatory processes can be captured by interest groups. Such processes can mask the undemocratic, exclusive, or elite nature of public-decision making, giving the appearance of broader participation and inclusive governance while using public funds to advance the interests of powerful elites. Participatory processes can conceal and reinforce existing injustices. Participatory budgeting can be abused to facilitate the illegitimate and unjust exercise of power.... To prevent these abuses, participatory process must fully recognize local politics and formal and informal power relations, so that the processes yield outcomes desired by the median voter(p.1).

(4) Some forms of public deliberation must be included within the framework of specific meetings/forums. This means that if citizens are invited to discuss budgeting in local councils or in parliaments, we would not view it as sufficient, because PB should include specific institutions and therefore a new public sphere. Thus, PB should be based on some kind of deliberation. This is the reason why we do not consider a survey on budgeting issues in which citizens would remain without contact with one other as PB. However, PB deliberation does not necessarily directly lead to decision-making.

(5) Some accountability on the results of the process is required. We have observed that in many participatory processes, participants never get feedback about whether or not their proposals are accepted. This should be different in participatory budgeting, through annual meetings or publications where organisers provide information about the realization of the proposed projects. (Sintomer and al., 2012)

Participatory budgeting programs act as "citizenship schools." The first stage of the participatory budgeting process, at the beginning of the yearly budgetary cycle, consists mainly of information meetings. These meetings provide governments, NGO's, and the most well-informed activists the opportunity to discuss matters pertaining to the budget, government authority and responsibility, taxation, and citizenship rights (social, political, and civil). New citizens are inundated with information, while longtime participants sharpen their own understandings. This is where NGOs play a large role, working with longtime participants to improve their political strategies while providing help to new participants. (Shah,2007).

1. A Non-Governmental Organization (NGO) or Civil Society Organization is any organization not established by government agreement. They comprise the "third sector" of modern society, in addition to the public and private sectors. (Church,2021,para.1)

## Types of Participatory Budgeting Programs

Participatory budgeting programs have two main tracks. One track, “participatory budgeting public works,” focuses on specific public works projects, which range from the paving of specific streets to the building of day care centers. This track garners the lion’s share of citizens’ interest, because it involves the distribution of resources to specific projects.

The second track, “participatory budgeting thematic,” focuses on general spending policies. These policies focus on more general trends, such as allocating increased spending to a particular type of health care program. These meetings tend to draw better-informed activists, who are more likely to be part of an issue-oriented social movement (Shah,2007).

According to Habermas (1989), participation processes must include all affected by a decision and disregard the social status of the participants. The first element of the typology, therefore, is the range of citizen involvement (the extent of representative participation). The range of involvement is narrow when only a handful of citizens or a particular socioeconomic group dominates decision making. The range becomes broader with the involvement of interest groups. It is broadest when large numbers of citizens representing different socioeconomic groups are directly involved. The involvement of more citizens<sup>1</sup> helps reduce the uncertainty inherent in any effort to make decisions about the future (Hellström, 1997).

1. Getting ordinary citizens involved requires that the analysis be easy to understand and relevant to the concerns of average citizens. Participation can occur in a variety of ways, such as involving citizens in publicity campaigns and events or inviting them to express their preferences by voting on policy and service delivery issues. The involvement of ordinary citizens also strengthens civil society groups’ efforts at monitoring and auditing public projects and services in a systematic way (Shah,2007).

Level	Representativeness	
	Broad	Narrow
<b>Full</b>		
Decisions	Public officials make decisions, but citizens have strong influence.	Public officials and selected interest groups make decisions.
Participation	Large, diverse groups of citizens engage in meaningful discourse with government.	Interest groups exert significant influence; most citizens lack opportunities to participate.
<b>Partial</b>		
Decisions	Public officials make decisions; citizens have limited influence.	Government elite make decisions; interest groups have limited influence.
Participation	Large, diverse groups of citizens engage in limited discourse with government.	Interest groups exert influence; most citizens lack opportunities to participate.
<b>Pseudo</b>		
Decisions	Public officials make decisions.	Public officials make decisions in nontransparent manner.
Participation	Participation is symbolic but involves large, diverse groups of citizens.	Participation is symbolic, involving only a small number of citizens.

(Fig.7) Typology of citizen participation (Moynihan, 2003, p.170)



Participation  
budgeting in Germany

(MITKUNSTZENTRALE, 2022)

## Participation budgeting as consulting in Germany

This section will examine the fundamental question of how German participatory budgets are organized and defined. This serves as the foundation for us as we examine the present PB situation in Germany in more detail. Utilizing information on German participatory budgets gathered from the website [www.buergerhaushalt.org](http://www.buergerhaushalt.org),<sup>1</sup> the “typical” characteristics of these budgets are presented and assessed in light of the goals and ongoing discussions.

The typical participatory budgeting in Germany is consultative: Citizens make suggestions and give hints. With their local expertise and prioritization, they enrich the technical discussion about budget planning. The administration shall take into account the proposals and indications when drawing up the budget. The municipal council decides on the proposals and justifies which proposals can be implemented and which cannot.

Participatory budgeting at the municipal level is normally aimed at all residents of a city or municipality. Anyone who would like to help shape their city can participate.

Some participatory budgets specifically address specific groups, for example women in the case of gender budgeting, or young people in the case of school households. While this type of participatory budgeting concretizes its target group, other participatory budgets appeal to a very heterogeneous target group. Some are even explicitly aimed not only at all inhabitants of a city, but generally at all interested people. The idea behind it: The idea counts, not the origin of a person.

1. This website – Buergerhaushalt.org – is Germany’s online portal for anyone interested in participatory budgeting and related issues.

The site enables anyone interested to obtain basic information on participatory budgeting (PB), or find out more about current PB projects in the German-speaking countries and worldwide. Users can also obtain practical tips and materials for implementing PB, and profit from the lessons learned by other expert PB practitioners.

The English version of the website contains a selection of texts from the German version. It is designed to provide all interested parties outside the German-speaking countries with an overview of the current debates, trends, challenges and development status of PB in Germany.



Basically, the “participant budget” is another instrument of citizen participation - here citizens participate in an online process in the city's financial planning. What sounds rather brittle in theory turns out to be new dynamics and quality in practice. (Knopp, 2022,para.1)

In Germany, PB is typically consultative: Citizens submit proposals and make comments. They enrich the professional budget planning debate by contributing their local expertise and priorities. Administrators take these proposals and comments into account when drafting the budget. The local council decides on the proposals, and explains why which proposals can be implemented and which not (Bildung, 2022, definition-and-frequently-asked-questions).

More and more local authorities are introducing participatory procedures for their municipal budget. By doing so they are giving citizens an opportunity to contribute and discuss their ideas on how the municipality should spend its money. So far, there has been no PB at the federal or state level in Germany.

The core phases of any PB process are:

Information | Through public information work the population are made aware of the budget and mobilised for PB.

Participation | Citizens can contribute their own ideas and priorities, either as ‘advisors’ who submit their proposals to policymakers and administrators, or as ‘decision-makers’ on a specific budget. As well as citizens contributing their own ideas, the key element of this phase is public discourse, which takes place for instance at public meetings or online.

Accountability | The organisers of the process provide information on the outcome of the participation phase. They communicate and explain why which particular ideas submitted by citizens were implemented, and which were not (Bildung, 2022, definition-and-frequently-asked-questions).

The secret of the success of participatory budgeting lies in the modern, online-supported three-step process of information, consultation and accountability. Information is experiencing a new form of bundling and transparency in the budget process thanks to the Internet. The information can be called up at any time, is accessible to everyone, it can be networked and acts like an archive. Each user can use these selectively for his political priorities, evaluate them and bring them into the proposal phase as a result in the form of a proposal. It does not necessarily have to be about purely quantifiable proposals for savings or spending policy. Many of the suggestions can also be of a political nature and should be understood as feedback to politicians (Knopp, 2022,para.5).

## **Participate budgeting history in Germany**

In 1998 the small southern German municipality of Mönchweiler became the first local authority to also involve citizens in municipal financial planning (Günther, 2007). Mönchweiler was soon followed by a handful of other municipalities in the 'Local authorities for the future' network (Franzke & Kleger, 2010), a group of municipalities that had got together to test new conceptual approaches to administrative modernisation. In the year 2000 the Ministry of the Interior of the German federal state of North-Rhine Westphalia, in cooperation with the Bertelsmann Foundation, launched the 'Pilot Municipalities in North Rhine Westphalia' project, in which six local authorities tested the instrument of participatory budgeting (Franzke & Kleger, 2010).

The year 2004 heralded the beginning of a new phase of PB in Germany. this phase began with a slump: when the pilot project in North Rhine Westphalia came to an end, several local authorities there broke off their efforts to continue with their participatory budgets. At the same time, though, the project had succeeded in encouraging new municipalities such as the city of Cologne to explore the possibility of introducing PB. Furthermore, the Federal Agency for Civic Education had approached a number of districts of Berlin, including Berlin-Lichtenberg, with its concept for PB in cities (Herzberg, 2005).

The first German municipalities to practice PB – and this applies to most such municipalities to date – introduced this form of budgeting in the hope of achieving two mutually reinforcing effects. First of all, local government structures that had become bogged down were to be modernised through citizen participation. Secondly, citizens were to be granted a larger say, in support of a trend toward more responsive local government (see Rüttgers, 2008) that would enable citizens to become ‘customers/consumers, recipients of highquality services delivered for their convenience’ (Herzberg, Sintomer, Allegretti & Röcke, 2010)

The publication of budgets, which is legally prescribed in several of Germany’s federal states in order to provide citizens with an opportunity to raise any objections, proved inadequate. To this day only few citizens make use of this opportunity, because the documents published tend to be ‘a closed book comprising hundreds of pages of columns of figures and incomprehensible expert commentary’ (Märker & Nitschke, 2008). At the same time, ‘civil society pressure for greater participation and co-determination’ (Märker & Nitschke, 2008)

Since 2007 online participation, or e-participation, has also played a major role. Cologne’s online-based participatory budget has inspired many other participatory budgets (Rüttgers, 2008). More recent trends include a focus on proposals for cost-saving measures, i.e. involving citizens in budget consolidation, and presenting the budget in a transparent, legible form, particularly using open data.

All participatory budgets in Germany have in common the three phases of operationalisation: ‘information – consultation – accountability’, albeit with differences in emphasis (Rüttgers, 2008). These three phases were already evident in the first participatory budget in 1998 (Schruoffeneger & Herzberg, 2008).

## **Participate budgeting in Berlin:**

As we’ve explained, the municipality of the city is in charge of PB in Germany, and they receive recommendations from residents in the form of “consultants.” The finest resource for information about the city of Berlin is its municipal website, which is located at [berlin.de](http://berlin.de). On the other side, they have a dedicated website called [mein.berlin.de](http://mein.berlin.de) for citizen engagement. The publisher of [mein.berlin.de](http://mein.berlin.de) is the Senate Chancellery of the Governing Mayor. The individual projects are set up by the employees of the Senate administration, the district offices and the district management. It’s interesting to look around the website where you may locate ongoing projects. From there, you can attend workshops or send your proposal straight to the project manager, who will then determine whether or not to take it into consideration.

You could discover the primary characteristics of engagement in this manner as well. The desire for participation and civic engagement can be clearly felt in the city, with every third Berliner doing voluntary work. With the first state-wide participatory budget in Germany, Berlin wants to take this commitment to a new level, because citizens are actively involved in the planning of public investment spending and can set their own priorities.

It is planned to pilot a participatory budget at state level in the state of Berlin in 2022/23. The declared political goal of this instrument in Berlin is to strengthen social coexistence and the political culture in our city and to promote participatory democracy. The Senate Department for Finance is developing the concept for establishing Berlin's first participatory budget "participatory budget" in cooperation with the Senate Chancellery, which is responsible for matters relating to civic engagement. Implementation in four phases is planned:

- Proposal phase
- Evaluation phase
- Coordination phase
- Implementation phase

In a first step, a detailed concept will be developed by mid-2021. The funding National and international municipalities are already implementing different models. In some cases, participation refers to the entire budget process, but mostly to the distribution of a fixed budget (so-called citizens' budget). This will also be the guiding principle for action in Berlin. The state-wide participatory budget should complement the already existing participatory budgets of the districts - as a modern and transparent instrument of citizen participation.



Orlowski, S. K., Lawn, S., Venning, A., Winsall, M., Jones, G. M., Wyld, K., Damarell, R. A., Antezana, G., Schrader, G., Smith, D., Collin, P., & Bidargaddi, N. (2015). Participatory Research as One Piece of the Puzzle: A Systematic Review of Consumer Involvement in Design of Technology-Based Youth Mental Health and Well-Being Interventions. *JMIR human factors*, 2(2), e12. <https://doi.org/10.2196/humanfactors.4361>

Horgan, D., & Dimitrijevic, B. (2019). Frameworks for citizens participation in planning: from conversational to smart tools. *Sustainable Cities and Society*, 48, [101550]. <https://doi.org/10.1016/j.scs.2019.101550>

Sanoff, H. (1999). *Community Participation Methods in Design and Planning* (1st ed.). Wiley.

Sanoff, H. (1990). *Participatory Design: Theory and Techniques*. Henry Sanoff.

Röcke, Anja. (2014). Framing Citizen Participation. Participatory Budgeting in France, Germany and the United Kingdom. 10.1057/9781137326669.

Sintomer, Yves & Herzberg, Carsten & Röcke, Anja & Allegretti, Giovanni. (2012). Transnational Models of Citizen Participation: The Case of Participatory Budgeting. *Journal of Deliberative Democracy*. 8. 9. 10.16997/jdd.141.

Lee, Y. (2016, April). Design participation Tactics: involving people in the design of their built environment. Pao Yue-kong Library. [https://www.academia.edu/26066203/\\_Design\\_Participation\\_Tactics\\_enabling\\_people\\_to\\_design\\_their\\_built\\_environment\\_](https://www.academia.edu/26066203/_Design_Participation_Tactics_enabling_people_to_design_their_built_environment_)

Hornby, A. S., & Crowther, J. (1995). *a person who uses the services or advice of a professional person or organization*. Oxford, England: Oxford University Press

Heath, Robert Lawrence, ed. (2005). "Public sphere (Öffentlichkeit)". *Encyclopedia of public relations*. Vol. 2. SAGE. ISBN 978-0-7619-2733-4.

Wallach, W., & Asaro, P. (2017). *Machine Ethics and Robot Ethics*. Routledge.

Jones, P. B., Petrescu, D., & Till, J. (2005). *Architecture and Participation*. Taylor & Francis.

Shotter, J. (1993) *Cultural Politics of Everyday Life: Social Constructionism, Rhetoric and Knowing of the Third Kind* (Buckingham: Open University Press).

Shah, A. (2007). *Participatory Budgeting (Public Sector Governance and Accountability)*. World Bank Publications.

Moynihan, Donald P. (2003). "Normative and Instrumental Perspectives on Public Participation: Citizen Summits in Washington, D.C." *American Review of Public Administration* 33 (2): 164–88.

King, Cheryl Simrell, K. M. Feltey, and B. O' Neill Susel. (1998). "The Question of Participation: Toward Authentic Public Participation in Public Administration." *Public Administration Review* 58 (4): 317–25.

Habermas, Jurgen. (1989). *The Structural Transformation of the Public Sphere*. Cambridge, MA: MIT Press.

Hellström, Tomas. (1997) "Boundedness and Legitimacy in Public Planning." *Knowledge and Policy: International Journal of Knowledge Transfer and Utilization* 9 (4): 27-42.

Church, Jim (2021). "Library Guides: Non Governmental Organizations (NGOs): Introduction". [guides.lib.berkeley.edu](https://guides.lib.berkeley.edu). Archived from the original on 26 August 2021. Retrieved 8 August 2022.

Leverly, Sally (2008). "NGOs, the UN and APA". American Psychological Association. Retrieved 8 August 2022.

Röcke, A. (2014). Framing citizen participation : Participatory budgeting in France, Germany and the United Kingdom

Günther, Albert (2007). *Der Bürgerhaushalt: Bestandsaufnahme – Erkenntnisse – Bewertung*. Richard Boorberg Verlag.

Franzke, Jochen & Kleger, Heinz (2010). Bürgerhaushalte: Chancen und Grenzen. In *Modernisierung des öffentlichen Sektors*, 36, Edition Sigma.

Herzberg, Carsten (2005). *Bürgerhaushalt in Großstädten: Arbeitsmaterialien für die Umsetzung*. Bundeszentrale für politische Bildung: Bonn.

Herzberg, Carsten, Sintomer, Yves, Allegretti, Giovanni & Röcke, Anja (2010). *Learning from the South: Participatory Budgeting Worldwide – an Invitation to Global Cooperation*. Dialog Global No. 25. InWent/Serviceestelle Kommunen in der Einen Welt: Bonn.

ärker, Oliver & Nitschke, Ulrich (2008). Bürger als Ideengeber für die Haushaltsplanung. *Der städtetag* (4), p.17 – 21.

Märker, Oliver & Rieck, Sophia (2008). Bürgerhaushalte in Deutschland Statusbericht – 03. Dezember 2008. Bundeszentrale für politische Bildung, InWent/Serviceestelle Kommunen in der Einen Welt.

Rüttgers, Martin (2008). *Bürgerhaushalt: Information, Partizipation, Rechenschaftslegung*. Arbeitskreis Bürgergesellschaft und Aktivierender Staat der Friedrich Ebert-Stiftung: Bonn.

Lee, Y. (2006) *Design Participation Tactics: Redefining User Participation in Design*, in Friedman, K., Love, T., Côrte-Real, E. and Rust, C. (eds.), *Wonderground - DRS International Conference 2006*, 1-4 November, Lisbon, Portugal. <https://dl.designresearchsociety.org/drs-conference-papers/drs2006/researchpapers/60>

Kwiecinski, K., Markusiewicz, J., & Pasternak, A. (2017). *Participatory Design Supported with Design System and Augmented Reality*. Proceedings of the 35th International Conference on Education and Research in Computer Aided Architectural Design in Europe (eCAADe) [Volume 2].

Bildung, B. F. P. (2022, November 18). *Definition and Frequently Asked Questions*. bpb.de. <https://www.bpb.de/themen/stadt-land/buergerhaushalt/513378/definition-and-frequently-asked-questions/>

Knopp, A. (2022, November 18). *Was bringt ein Bürgerhaushalt?* bpb.de. <https://www.bpb.de/themen/stadt-land/buergerhaushalt/513047/was-bringt-ein-buergerhaushalt/>

# 3

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Toward  
Net Zero  
future

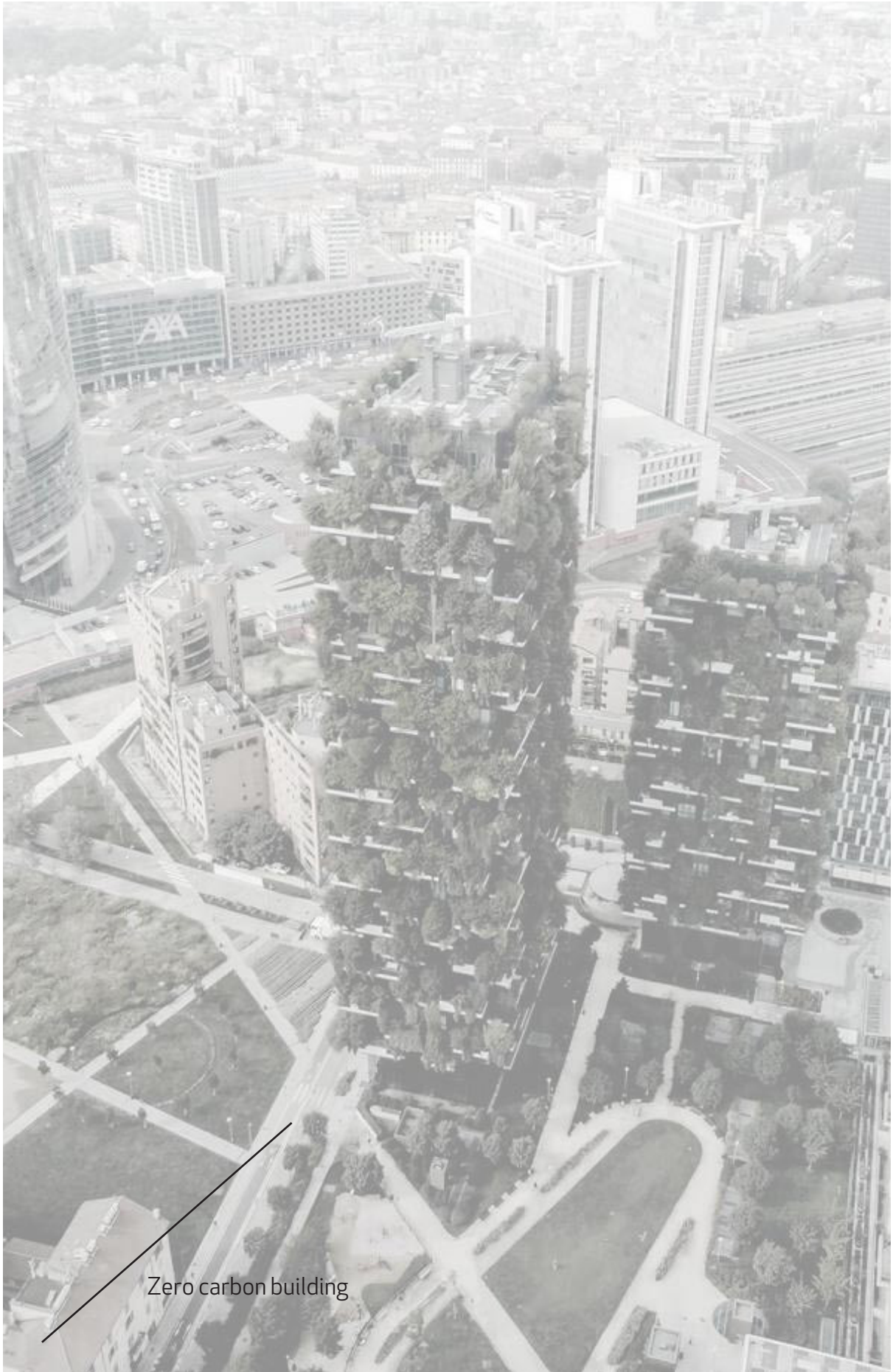
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Few attempts exist to explore how the public and stakeholders can work in partnership to achieve ZCBs and secure long-term interests of sustainable development.

(Pan,2013) Zero Carbon Buildings:  
Contexts, Challenges and Strategies.







Zero carbon building

(Limited,2020)

## Introduction

Recently, numerous communities all around the world committed to modernizing their existing building stock in order to become carbon neutral. However, the objectives of the evaluation and the methods of analysis are unclear and diverse, and the literature has not yet provided a consensus definition of a carbon-neutral building (CNB).

To achieve the Paris Agreement's vision of a decarbonized world and the Sustainable Development Goals' vision of equitable climate action, reducing the carbon footprint of buildings will be at the center of actions to mitigate the impacts of climate change. The building sector today is responsible for a staggering one-third of global energy consumption and energy-related carbon emissions.<sup>2</sup> Zero carbon buildings can create significant equity benefits by reducing energy poverty, strengthening energy resilience, and improving energy access for all (Becqué, 2019).

Public and private actions aligned toward climate action must lead the building sector on a path of rapid CO<sub>2</sub> emissions reductions. A ZNC<sup>1</sup> definition clarifies the approach for meeting the 2030 Challenge, American Institute of Architects AIA 2030 Commitment, and the China Accord's "carbon neutral" target, and can play an important role in guiding the design and development of new and rebuilt urban buildings as we all work to meet the goals set by the Paris Agreement (Architecture 2030 et al. 2016).

ZCB<sup>2</sup>s are often regarded as solely green or zero carbon products delivered by the supply side, or as merely the extension of government climate change policy into the building sector. Although there is increasing building energy research interest in user behaviour, little knowledge is known of the relationships and interactions between the supply, demand, regulation and institution sides of ZCBs. Few attempts exist to explore how the public and stakeholders can work in partnership to achieve ZCBs and secure long-term interests of sustainable development (Pan, 2013).

1. A highly energy efficient building that produces on-site, or procures, enough carbon-free renewable energy to meet building operations energy consumption annually (Zero Net Carbon (ZNC): A Definition - Architecture 2030, n.d.).

2. A zero-carbon building is highly energy-efficient and minimizes greenhouse gas emissions from building materials and operations. Until all emissions can be eliminated, high-quality carbon offsets can be used as a counterbalance. The ZCB standards define low-carbon design and operational performance for buildings (Canadian Green Building Council, 2022, para.7).

"The massive use of resources, and the related environmental impacts, are evident in the construction sector that, in 2018, globally accounted for 36% of final energy use, and 39% of energy and process-related carbon dioxide (CO<sub>2</sub>) emissions. In particular, 11% of the emissions resulted from manufacturing building materials and products, such as steel, cement, and glass, and 28% resulted from building operations" (Architecture 2030 et al. 2016).

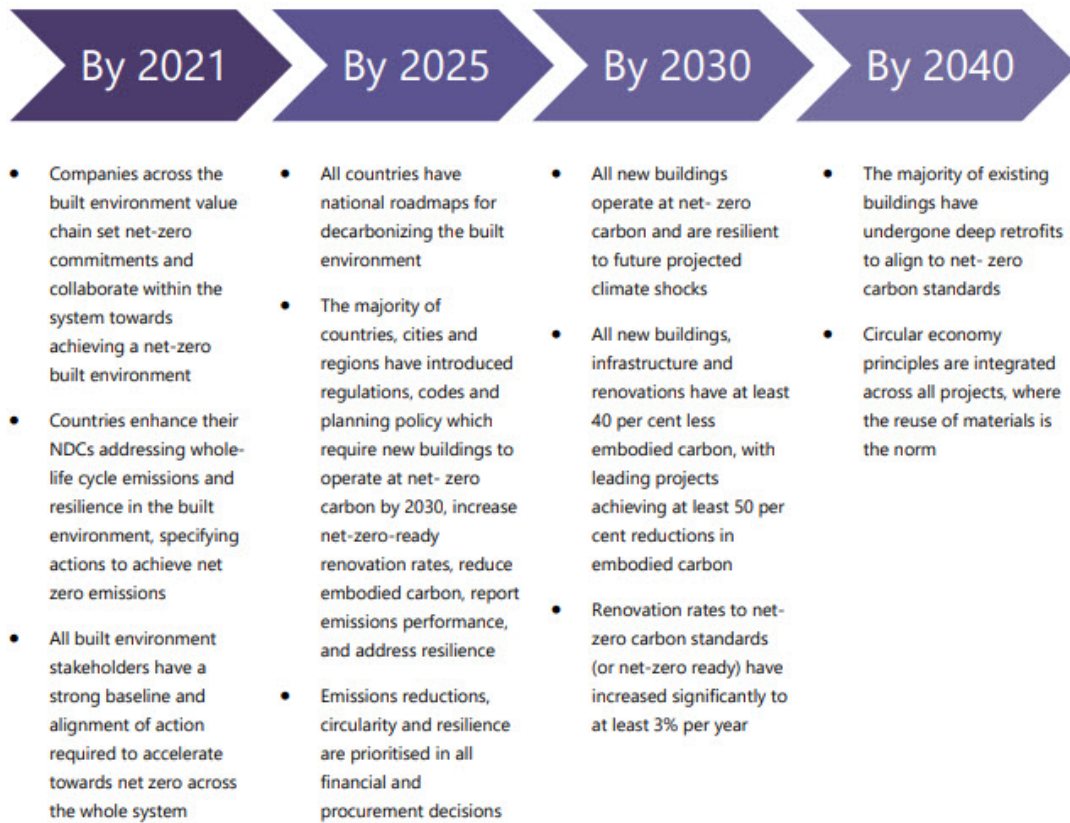
1. Based on WRI a global research organization. "WRI is a global research organization that works with governments, businesses, multilateral institutions and civil society groups to develop practical solutions that improve people's lives and ensure nature can thrive." (World Resources Institute | Making Big Ideas Happen, n.d.)

In December 2015, the world came together in Paris and reached a monumental agreement to limit global average temperature increase to "well below 2°C and to drive efforts to limit the temperature increase even further to 1.5°C above pre-industrial levels."

To put this in perspective, the entire population of the western hemisphere is about 1.1 billion people. This trend points toward urban buildings and built environments as the source of solutions to address the climate change crisis.

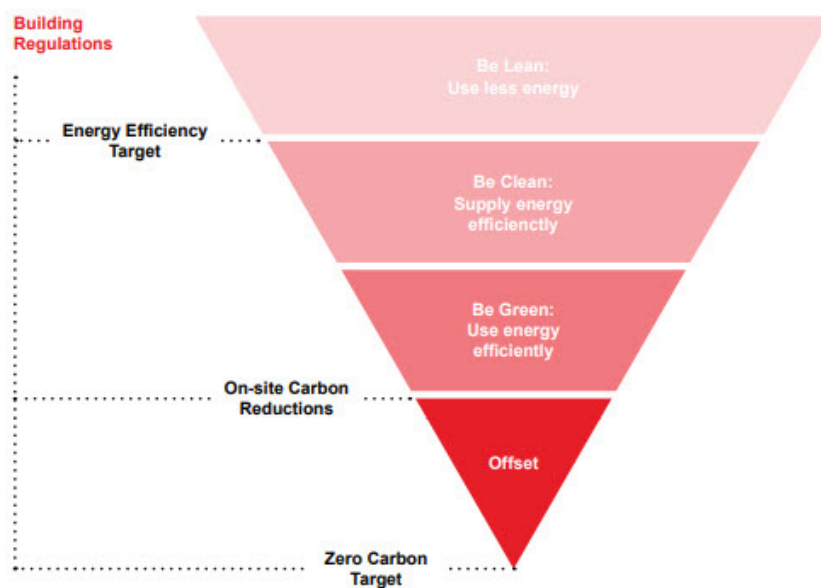
To keep the global average temperature increase to well below 2°C, the building sector must adopt a clear definition for both new and existing building energy consumption that is based on zero net CO<sub>2</sub> emissions <sup>1</sup>(Architecture 2030 et al. 2016).

"Very few countries/regions have set their ZCB policies, most regarding it as part of their climate change policy or building energy codes and regulations. The UK is the first country to set a timetable for delivering ZCBs. However, the definition and policy of ZCB, since its announcement in 2006, have encountered serious debate. A key point of the debate is the scope of the energy with which carbon emissions are associated, i.e. from the original proposed complete zero carbon (including both regulated, i.e. for space heating, ventilation, lighting and hot water; and unregulated energy, i.e. for cooking, washing and electronic entertainment appliances) to regulated energy only. Another point of the debate is the three tier hierarchy of measures to achieving zero carbon, i.e. energy efficiency, carbon compliance and allowable solutions, with allowable solutions being criticised for its fundamental weakness" (McLeod, 2012)



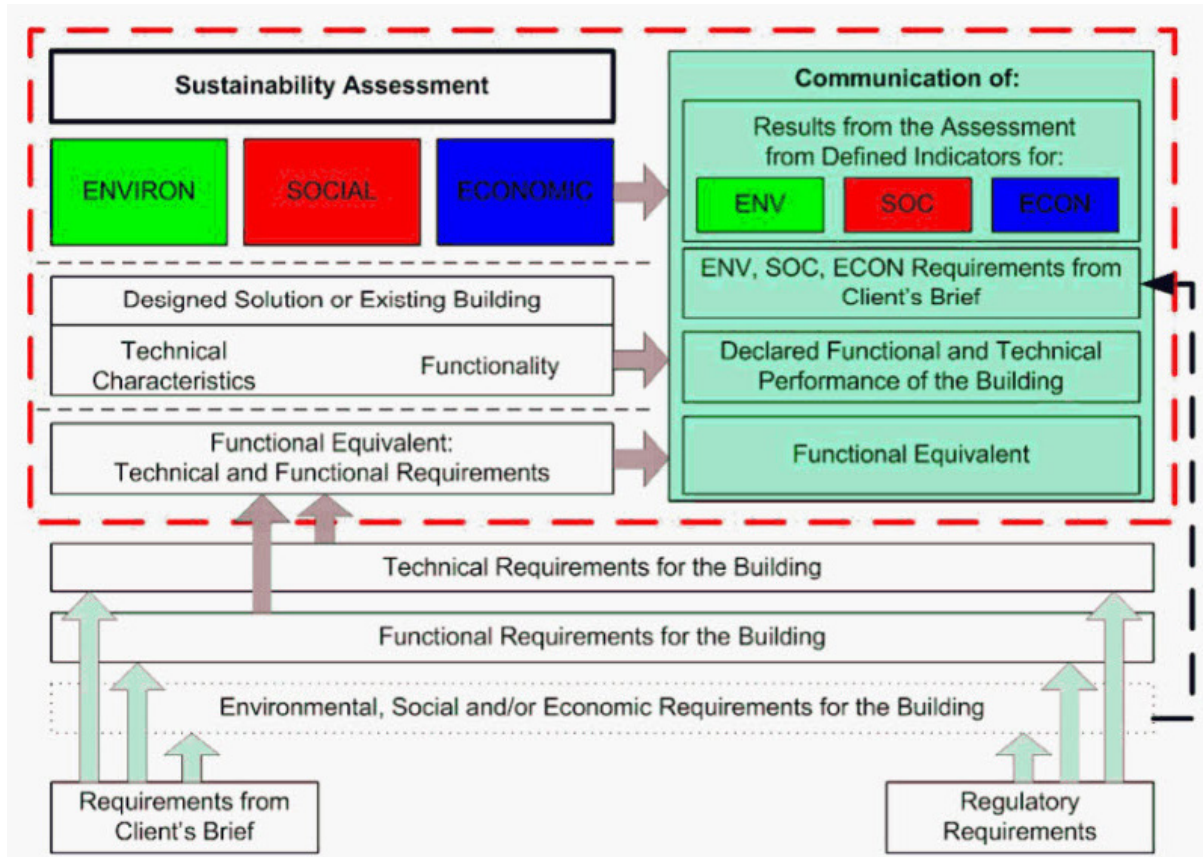
(Fig.8) Route to net-zero buildings, UNFCCC (United Nations,2020)

Operational emissions (from energy used to heat, cool and light buildings) account for 28 per cent, and the remaining 11 per cent are embodied carbon emissions associated with the production of materials used in construction over the whole building life cycle. Decarbonizing the built environment across the entire life cycle is therefore critical to meeting the 1.5°C target. However, the sector is not currently on track. Buildings-related CO<sub>2</sub> emissions rose, reaching an all-time high of 10 GtCO<sub>2</sub>, in 2019 (United Nations,2020).



(Fig.9) The net zero design approach (Arup,2021)

Based on European Committee for Standardization, (2022) the social dimension of sustainability concentrates on the assessment of aspects and impacts of a building expressed with quantifiable indicators. The social performance measures will be represented through indicators for the following social performance categories: **accessibility, adaptability, health and comfort, loadings on the neighbourhood, maintenance- safety/security, sourcing of materials and services and stakeholder involvement.**



(Fig.10) the assessment of aspects and impacts of a building expressed with quantifiable indicators (European Committee for Standardization, 2022).

## Embodied Carbon

While many are familiar with the terms “carbon footprint” or “embodied carbon”, use of the term carbon has been used loosely in many circles. In some cases “carbon” may mean CO<sub>2</sub>e, or the total equivalent Global Warming Potential. However, there are other cases, such as some of the more accessible structural material databases, where embodied carbon means only the CO<sub>2</sub> emissions associated with a quantity of material. For this reason it is best to speak of embodied CO<sub>2</sub>e, or “climate change impact in CO<sub>2</sub>e”.

## Embodied Energy

“Embodied energy reports the total energy (kilojoules) used to produce a building, building product or material. Total energy use is different and is a typical output of a comprehensive LCA. Total energy use should reflect all life cycle phases including use and disposal, but embodied energy does not include use and may or may not include installation, maintenance and disposal. Although products with higher embodied energy often have higher embodied carbon, the two are not always proportional as carbon emissions depend upon the energy source.” (Simonen, 2013).

## Zero Carbon Buildings techniques

ZCBs are more achievable when the definition is expanded beyond the boundary of the individual building to allow the use of off-site clean energy or consideration across a portfolio of district or municipal buildings. Although embodied carbon is important, current ZCB techniques mostly focus on operational carbon emissions. A building's (or a collection of buildings') operational emissions can be reduced to zero by focusing on three key factors relating to energy supply and demand:

1. Recommended only in cases where efficiency measures and renewable energy (RE) sources cannot meet 100 percent of energy demand.

**Energy efficiency (EE):** A building's energy consumption may be reduced in many ways, starting with passive design measures. What we call basic EE involves pursuing the minimum required level of energy efficiency by ensuring that the building complies with local codes and standards. In many countries, such codes and standards still have considerable untapped potential for higher performance. Advanced EE involves more ambitious energy performance that goes beyond minimum regulatory requirements (Becqué, 2019,p.12).

**Renewable energy (RE):** Further reductions in building emissions can be achieved by using carbon-free renewable energy sources. The options include on-site RE generation, off-site RE purchase, or off-site RE generation. The cost of renewable energy technologies for generation and storage have fallen considerably in recent years, and renewables are increasingly able to compete economically with conventional grid energy, making renewable energy a more attractive option (Becqué, 2019,p.12).

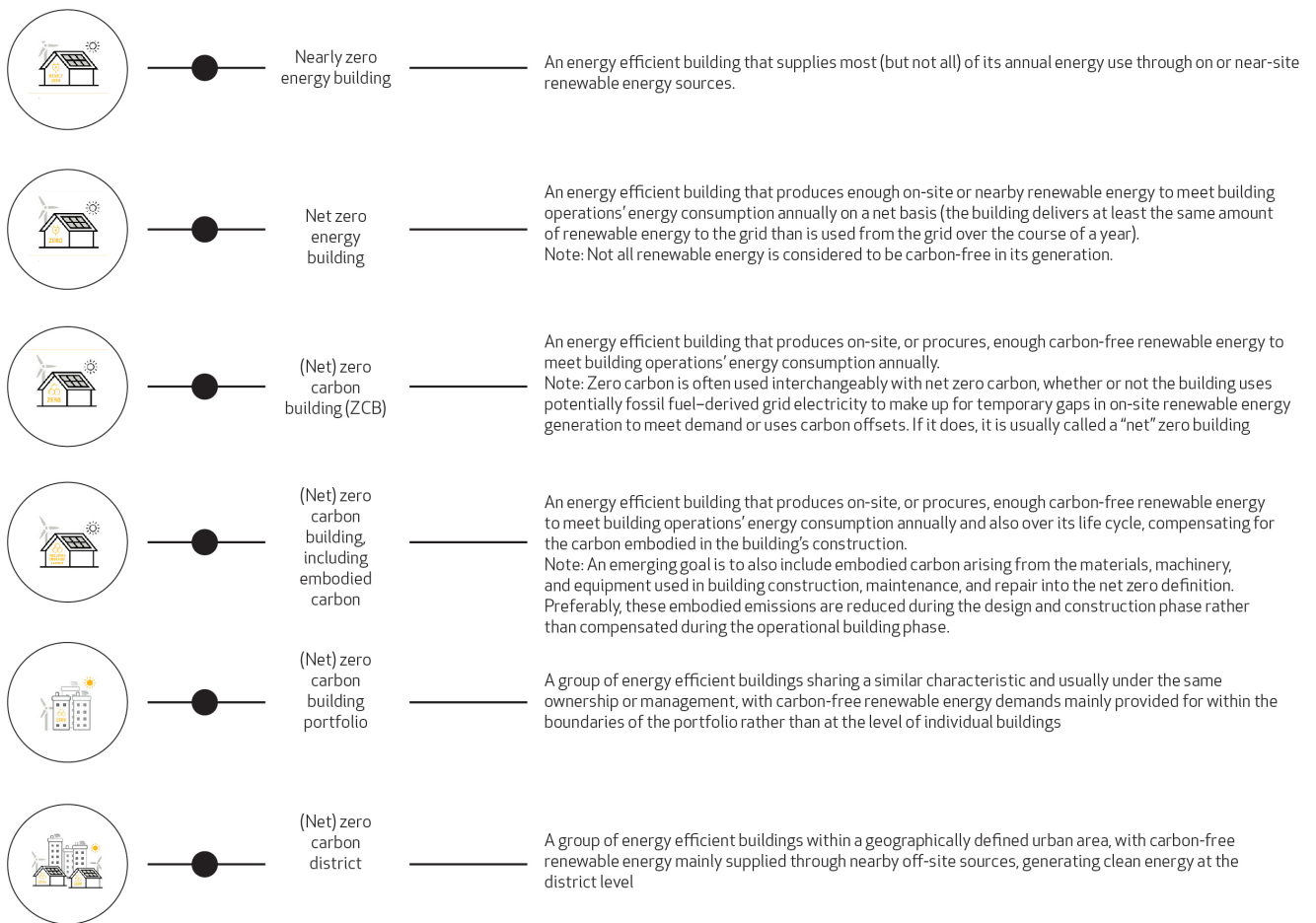
**on-site RE generation:** "On-site renewable energy systems of adequate capacity are not possible for all buildings because of limited roof space, shading or other constraints." (RESOURCES - ZERO Code,2020, Off-Site Procurement of Renewable Energy) "Where on-site generation for individual buildings is not a viable option due to technical, financial, and/or legislative barriers, off-site energy options can be explored" (Becqué, 2019,p.12). Once energy savings from improved efficiency have been realized, the goal is to use renewable energy that is carbon-free. Off-site sources are not favoured over on-site sources since on-site generating increases the total installed capacity of clean renewable energy inside a city or district. The building's energy security and resilience in the case of grid failures are further increased by on-site generation.

**Off-site RE purchase:** “Not all off-site procurement options are equal in terms of their environmental and carbon reducing impact. The best option if it is available and feasible is to install on-site renewable energy” (RESOURCES – ZERO Code,2020, Off-Site Procurement of Renewable Energy). Purchase of renewable energy locally might already be available. If not, interested parties may investigate the possibility of district-scale renewable energy production to power a number of structures in that region.

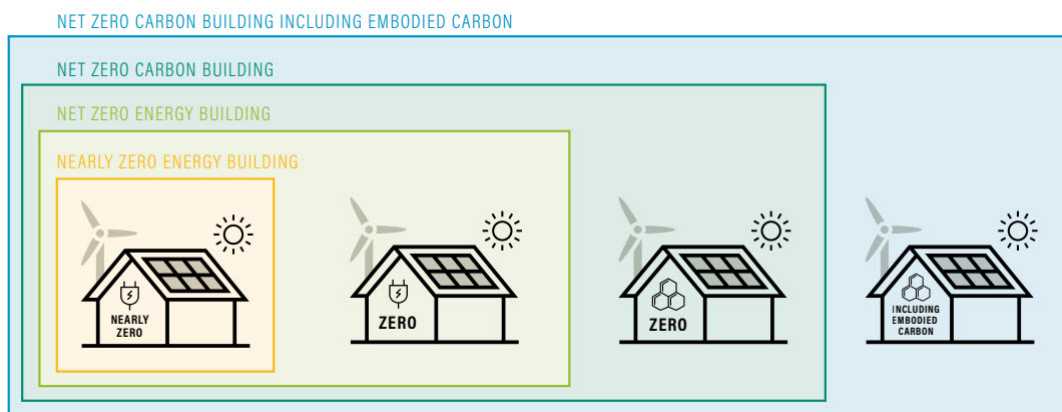
**off-site RE generation:** Such distributed generation solutions improve local energy security and resistance to power outages on the grid. However, high-density metropolitan areas might not have enough suitable space for nearby off-site generation and might instead need to rely on renewable energy produced well outside of district or even city boundaries.

**Carbon offsets<sup>1</sup>:** “Where a building cannot generate all its own energy and draws energy from the gas or electrical grids, then some form of carbon offsetting would be required to allow the building to be verified as net zero carbon. Likewise achieving a net zero carbon construction would currently require carbon offsetting to negate the embodied carbon emissions (associated with constructing the building) for a project to be verified as net zero carbon in construction. It may already be possible to purchase renewable energy locally. If not, interested stakeholders can explore the option of generating renewable energy at the district scale to serve a group of buildings within that area. Distributed generation models of this kind help enhance local energy security and resilience in case of grid power outages. High-density urban areas, however, may not have sufficient suitable space for on-site or local off-site generation, and may have to rely on clean energy generated well beyond the district or even city boundaries” (Net Zero Carbon Guide, para.1) “Realizing net-zero targets will require companies to use carbon offsets, but offsetting can only be credible as a secondary strategy. Carbon offsets should only be considered as part of the net-zero journey to balance out residual emissions that are unfeasible to eliminate.” (Saush, 2022,para.8) “Companies that choose to use carbon offsets must ensure their credibility. It is of paramount importance that a company purchase quality offsets that meet specific standards and are recognized by a credible program such as the Verified Carbon Standard. Offsets can undermine the credibility of a company’s climate and sustainability strategy and, over time, be quite an expensive undertaking. Even more importantly, poor-quality offsets may offer no real benefit to the environment and may even potentially turn into a reputational risk for buyers.” (Saush, 2022,para.9) “Sometimes a combination of energy efficiency and generating or purchasing renewable energy does not eliminate 100 percent of a building’s operational carbon emissions. This leads to a nearly (net) zero carbon building. For existing buildings using fossil fuels such as gas for cooking or hot water heating, it may not always be feasible to fully eliminate carbon emissions. In such a case, carbon offsets may be used to compensate for the balance of emissions. Such offsets should preferably be able to prove additionality and should be used to invest in energy efficiency or carbon-free renewable energy projects elsewhere, although preferably within the boundaries of the city. The emissions reduction benefits must be claimed through a credible mechanism such as carbon credits or a local carbon credit fund” (Becqué, 2019,p.12).





(Fig.11) Overview of Commonly Applied Zero Building Concepts and What They Entail reproducing table from (Becqué, 2019,p.9)



(Fig.13) ZCB Concepts Can Be Seen as Nested, from Less to More Encompassing, in Terms of Their Ability to Achieve Carbon Neutrality (Becqué, 2019,p.10)

Stakeholders may decide to expand their definition of ZCB to include embodied carbon. To the extent that these embedded emissions cannot be reduced or avoided, credible carbon offsets may be used to compensate for them. These components can be combined in various ways to achieve a full 100 percent (net) reduction of a building’s operational carbon emissions. All combinations start with basic energy efficiency measures (basic EE) and other components are added in different proportions to achieve full carbon emissions reduction. (Becqué, 2019)

ZCB COMPONENTS	EXAMPLES OF MEASURES	PREFERRED HIERARCHY	
EE +	Basic EE: minimum energy efficiency (EE) in line with local codes & standards	<ul style="list-style-type: none"> <li>■ Building EE codes/standards</li> <li>■ Appliance MEPS<sup>a</sup></li> </ul>	(Baseline)
	Advanced EE: exemplary EE performance	<ul style="list-style-type: none"> <li>■ Incentives that encourage beyond-code/standard performance</li> </ul>	Energy efficiency first
RE + /or	+ On-site renewable energy (RE)	<ul style="list-style-type: none"> <li>■ On-site RE generation through solar panels or solar hot water systems</li> </ul>	On-site RE generation first
	+ Off-site RE (purchase)	<ul style="list-style-type: none"> <li>■ Green retail tariffs</li> <li>■ Power purchase agreement (PPA)<sup>b</sup></li> <li>■ Renewable energy credit (REC)<sup>c</sup></li> </ul>	Remainder that cannot be provided by EE or on-site RE
	+ Off-site RE (generation)	<ul style="list-style-type: none"> <li>■ Direct ownership of off-site RE assets</li> </ul>	
CO <sub>2</sub>	+ Carbon offsets	<ul style="list-style-type: none"> <li>■ Carbon credits purchased through investment in EE or RE reduction projects elsewhere</li> </ul>	Only if on- or off-site RE are not viable options or if embodied carbon is included in ZCB scope

(Fig.12) Emissions-Reduction Components of Zero Carbon Buildings (ZCBs) (Becqué, 2019,p.12)

## A Pathway for All Building Types

A zero net carbon (ZNC) building definition must accommodate all building types – new and existing residential, commercial, institutional, and industrial buildings – in various settings, including those located in dense urban environments where on-site renewable energy production may be limited. A ZNC building is here defined as: a highly energy efficient building that produces on-site, or procures, enough carbonfree renewable energy to meet building operations energy consumption annually.

### Efficiency First

While the metrics for a “highly energy efficient building” should be defined by each jurisdiction and professional organization, a ZNC building dramatically reduces its fossilfuel generated energy consumption, first through building design strategies and energy efficiency measures, then incorporates on-site renewable energy systems and then procures locally produced renewable energy to meet the balance of its energy needs .

## Net Balance

A zero net carbon balance is achieved when an equivalent unit of carbon-free renewable energy is produced (on or off-site) to offset each unit of fossil fuel energy used by the building. The “net” balance of carbon-free energy is critical to the definition, as this provides a path to achieve ZNC for buildings that use some form of fossil fuel energy or are unable to produce sufficient renewable energy on-site.

A ZNC building may meet its energy demands or offset its carbon-based energy consumption by the following:

- Production of on-site renewable energy
- Procurement of off-site renewable energy from local providers (Architecture 2030 et al. 2016).<sup>1</sup>

Based on a road map for moving to a competitive low carbon economy by 2050 has been set by the European Commission since 2011:

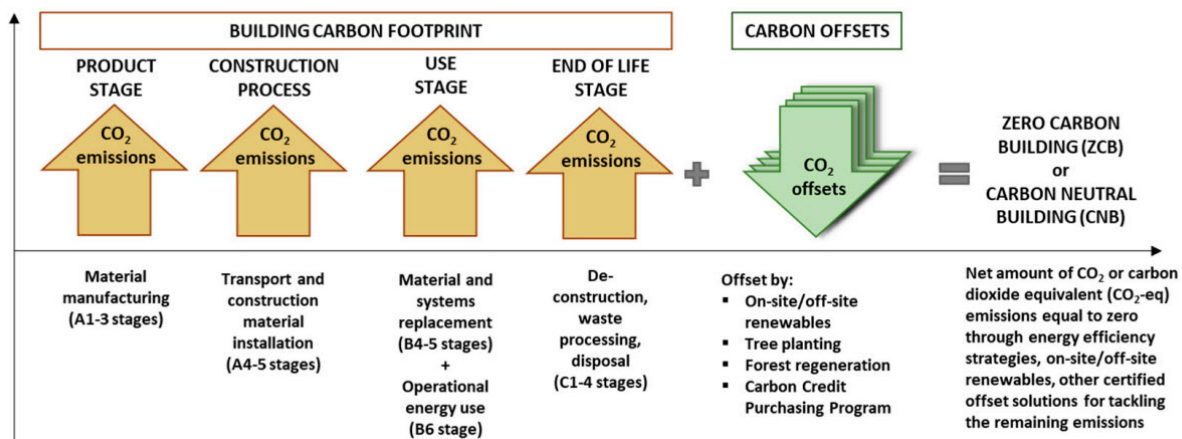
“The built environment provides low-cost and short-term opportunities to reduce emissions, first and foremost through improvement of the energy performance of buildings. The Commission’s analysis shows that emissions in this area could be reduced by around 90% by 2050, a larger than average contribution over the long-term. This underlines the importance of achieving the objective of the recast Directive on energy performance of buildings<sup>9</sup> that new buildings built from 2021 onwards will have to be nearly zero-energy buildings. This process has already started, with many Member States implementing stricter energy performance standards for buildings. On 4 February 2011 the European Council, taking account of the EU headline target, decided that from 2012 onwards all Member States should include energy efficiency standards in public procurement for relevant public buildings and services. By the end of 2011, the Commission will present a Communication on “Sustainable Construction” setting out a strategy on how to boost the competitiveness of this sector while improving its environmental and climate performance.” (A Roadmap for Moving to a Competitive Low Carbon Economy in 2050,” 2011,p.8).<sup>2</sup>

1. In summary, a ZNC building can achieve a carbon neutral balance through (in order of priority)a combination of design strategies and materials, energy efficiency measures, efficient equipment, renewable energy production, and clean energy procurement (Architecture 2030 et al. 2016)

According to C40 Networks' website<sup>1</sup> regulations and planning policy will also target existing buildings to make them net-zero carbon by 2050 to ensure cities deliver on the highest goals of Paris Agreement.

Buildings in urban areas are one of the largest sources of greenhouse gas emissions, and typically account for over half of a total city's emissions on average. In London, Los Angeles and Paris, buildings account for well over 70% of the cities' overall emissions, creating an enormous opportunity for progress on bringing emissions down. Currently, half a million people die prematurely each year due to outdoor air pollution caused by energy used in buildings.

1. About C40 Cities: C40 Cities connects 96 of the world's greatest cities to take bold climate action, leading the way towards a healthier and more sustainable future. Representing 700+ million citizens and one quarter of the global economy, mayors of the C40 cities are committed to delivering on the most ambitious goals of the Paris Agreement at the local level, as well as to cleaning the air we breathe. The current chair of C40 is Mayor of Paris Anne Hidalgo; and three-term Mayor of New York City Michael R. Bloomberg serves as President of the Board. C40's work is made possible by our three strategic funders: Bloomberg Philanthropies, Children's Investment Fund Foundation (CIFF), and Realdania.



(Fig.14) The overall approach to carbon neutrality considered in the study (Causone, 2021,p.6)

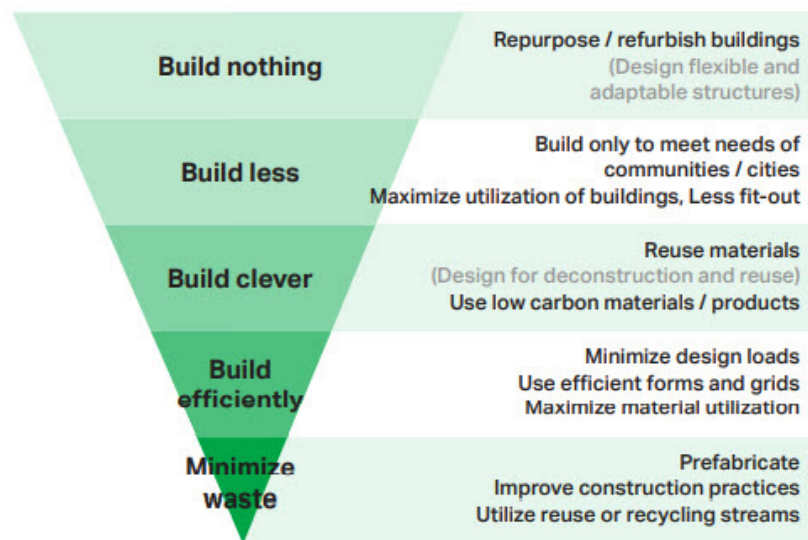
In the context of the building industry, the definition from the IPCC<sup>2</sup> means that the demand for construction materials and the demand for energy to operate buildings need to be reduced to a point where it can all be sourced without emitting additional GHG emissions.

This needs to be considered at systems level but also accounted for at the level of individual building assets by applying the following principles:

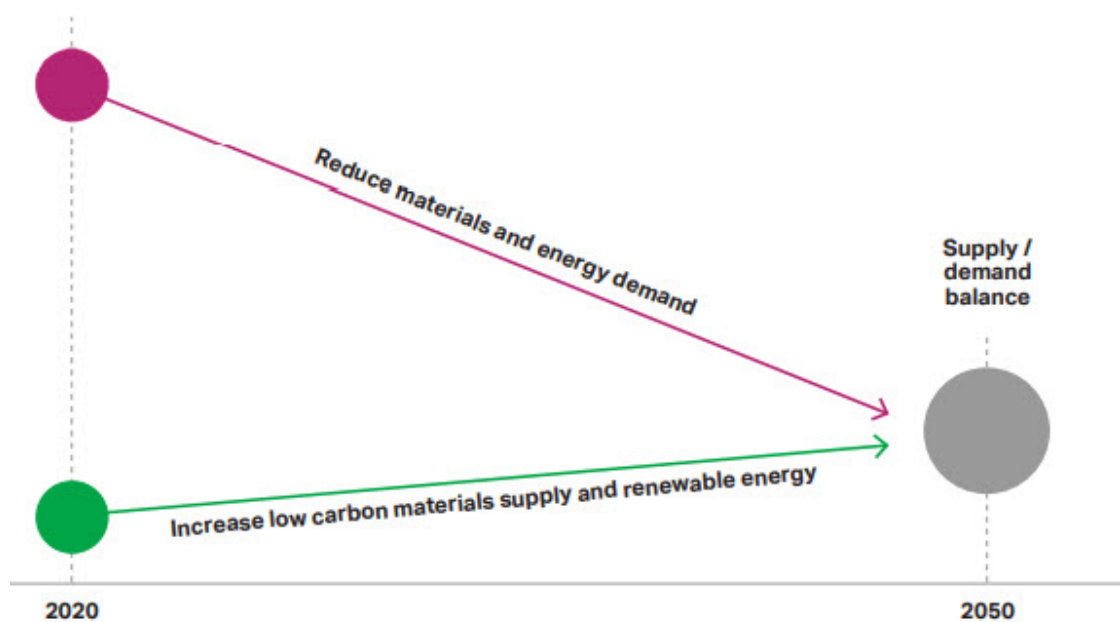
2. The Intergovernmental Panel on Climate Change (IPCC); "The IPCC is committed to preparing reports assessing the current state of knowledge of the science related to climate change that aim for the highest standards of scientific excellence, balance, and clarity." (IPCC Intergovernmental Panel on Climate Change, para,9)

1. Designing more efficient buildings – reduce material and energy demand
2. Using circular economy principles – reuse existing material and design new buildings to be dismantlable and reusable
3. Using renewable energies and low carbon materials
4. Neutralizing residual carbon emissions.

Although consensus is still building, certain types of offset are possibly an option to balance the minimised residual emissions and pursue a global net-zero built environment. (Arup, 2020)



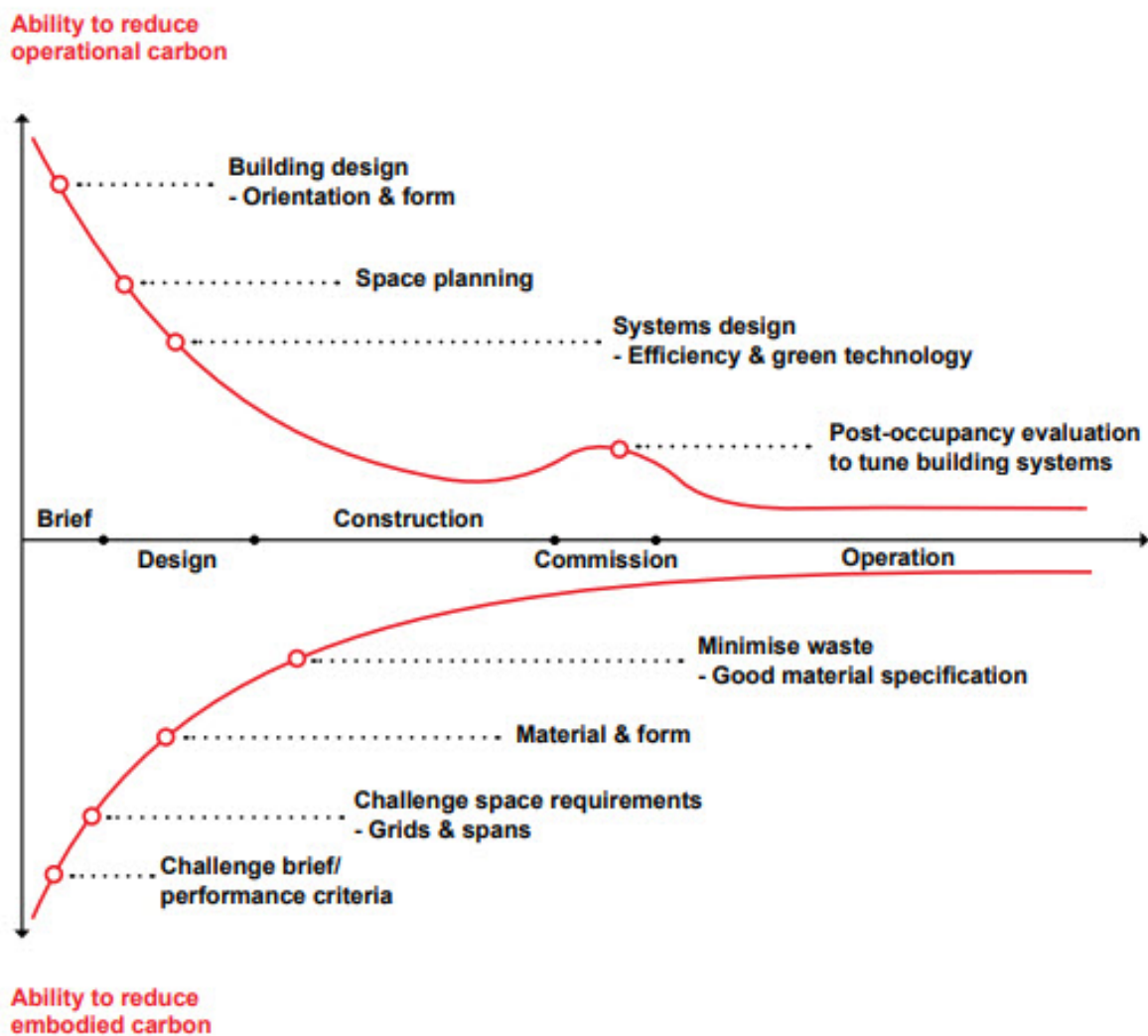
(Fig.15) Embodied carbon reduction strategy (Arup, 2021,p.15)



(Fig.16) Net-zero strategy for the built environment, (Arup, 2020,p.5)

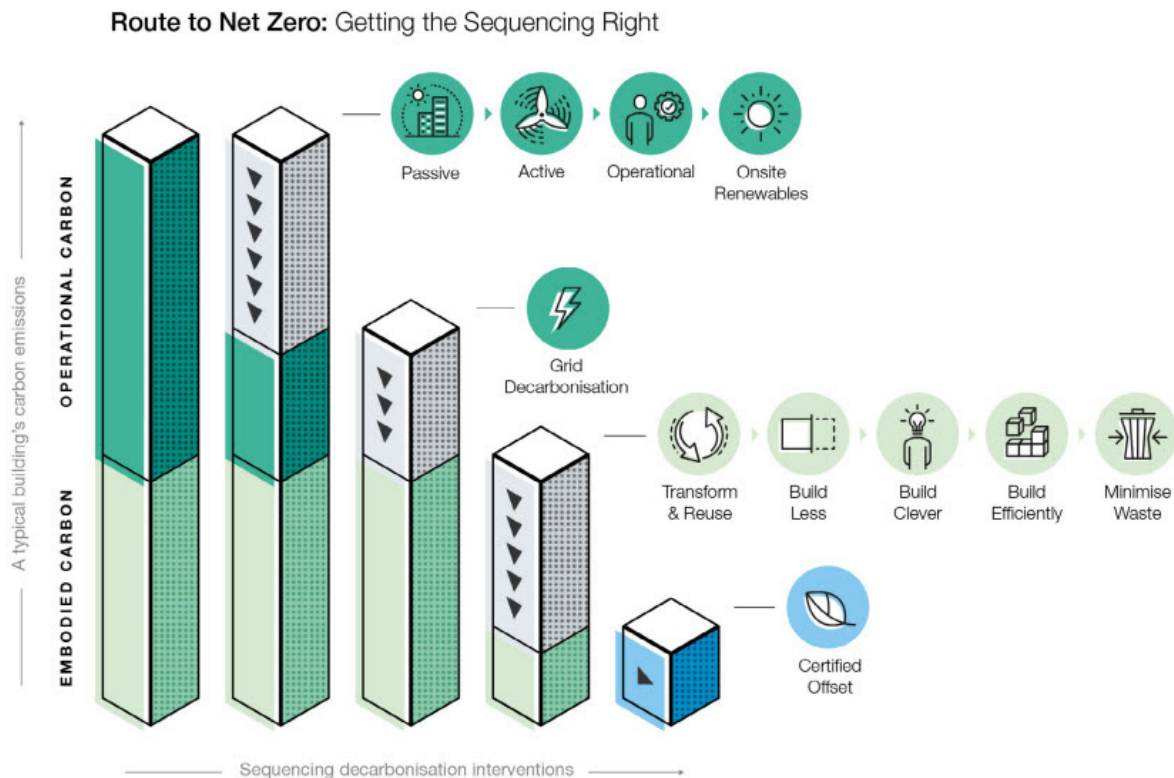
## To reach whole life carbon

“When the amount of carbon emissions associated with a building’s embodied and operational impacts over the life of the building, including its disposal, are zero or negative.” This requires reporting of carbon from the maintenance, repair, refurbishment and end-of-life stages of a building’s lifecycle (Transforming Existing Hotels to Net Zero Carbon, 2021).



(Fig.17) Both embodied carbon and embodied energy (Transforming Existing Hotels to Net Zero Carbon, 2021,p.19)

## Enabling operational net zero



(Fig.19) A whole lifecycle approach for net zero requires the right design brief, clear thinking about the sequencing of interventions and innovation (Net Zero Carbon Buildings: Three Steps to Take Now, 2020, p.8).

Achieving operational net zero requires a partnership between owners, occupants and operators. In the short term, we urgently need to establish a clear industry definition of 'net zero enabled' as a means of recognising the steps developers and owners are taking in this direction. This should encourage more to follow suit and deliver buildings that are capable of achieving net zero in the long term. Every project and site are different. Taking buildings on a journey towards net zero carbon requires a sequential approach to ensure that critical decisions are made at the appropriate point in the design process. (Net Zero Carbon Buildings: Three Steps to Take Now, 2020).

You can find the steps Arup is considering taking to achieve NET ZERO buildings by 2050 in the sections below:

## **Step 1: Defining net zero**

Net zero carbon is defined as a reduction in the demand for energy and materials to a level that can be met solely by sources that do not emit greenhouse gases. There is as yet no clear understanding as to the level of reduction in embodied emissions that will be required to achieve net zero. A clear view of the extent of embodied carbon reduction that is necessary will be critical to complete the picture and allow us to take a comprehensive approach to decarbonisation.

## **Step 2: Incentivising net zero**

Buildings that demonstrate the potential to achieve net zero when combined with sufficiently low occupant energy demand should be accredited as 'net zero enabled'.

It is important that we define clear markers for speculative buildings on a net zero trajectory, so that developers and portfolio owners have something to aim for in the short term. We need to define the concept of 'net zero enabled' – buildings that demonstrate the potential to achieve net zero when combined with occupants who maintain sufficiently low energy demand. 'Net zero enabled' accreditation will allow us to properly recognise buildings that are capable of achieving net zero once occupant energy demand reduces to an appropriate level. At the same time we need to be careful. 'Net zero enabled' needs to be defined as a temporary staging post, not an end in itself. Any new accreditations need to encourage organisations to continue on the journey to achieving net zero in operation.

## **Step 3: Taking a whole carbon lifecycle approach**

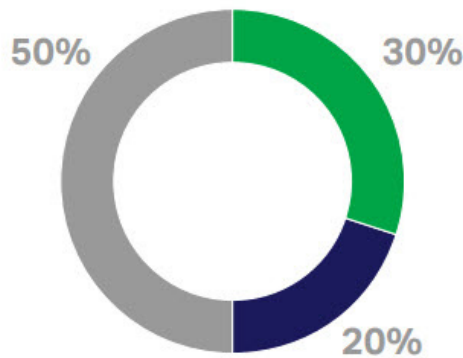
Embodied carbon emissions arising from new-build construction or refurbishment can represent a significant proportion of a building's whole life carbon impact. Our goal has to be to reduce all carbon emissions to net zero.

Until recently, little attention has been paid to the carbon impacts of constructing and refurbishing buildings. Yet our buildings are constructed using materials, components, and products. All of this material has to be extracted from the ground or (in the case of timber) grown, transported to a facility to be processed, transported again (perhaps numerous times) to be fabricated into a product, transported to site, and craned into place. All of these processes result in the emission of greenhouse gases – fuel for deliveries, and to heat, shape and treat, as well as releases from manufacturing processes. This impact is repeated on a smaller scale all the way through the life of a building, during its repair, maintenance and any refurbishment programmes. At end of life, we expend energy, and therefore emit carbon, once again in the demolition and disposal of assets. It is becoming clear that embodied carbon makes a significant contribution – between 30% and 70% of a typical building's total lifecycle emissions.



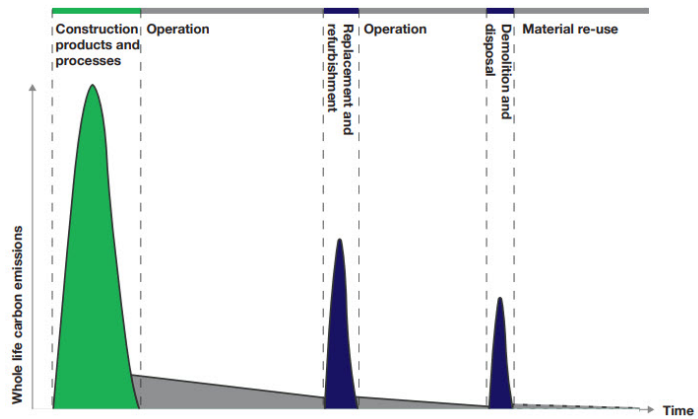
## Architecture phases and impacts in life cycle assessments

The term “LCA” stands for “Life Cycle Assessment,” and it refers to a sophisticated analysis tool used to evaluate the environmental impact of manufactured building components, material assemblies, and entire buildings. This useful analysis determines the direct and indirect inputs (like energy) and outputs (like carbon dioxide) that result from the production, transportation, installation, usage, maintenance, and disposal of a material or assembly. LCA can provide a more full view of the overall environmental impacts connected to the built environment by addressing the entire life cycle of a material from the moment the resources are harvested to end-of-life and disposal.



- Embodied A1-A5
- Embodied B-C
- Operational B6-B7

(Fig.20) Estimated distribution of carbon emissions per life cycle stage (Arup, 2021)

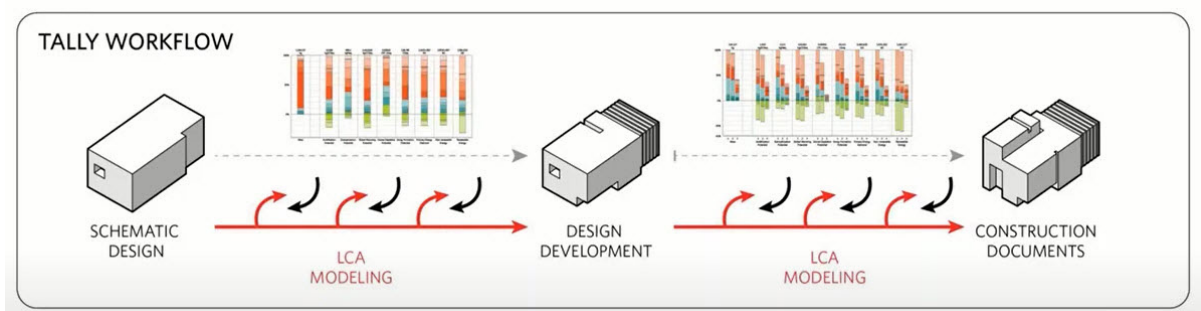


(Fig.21) Whole life carbon emissions, Arup (2020)

## Toward a lower embodied carbon footprint with Tally

Unfortunately, there's no single formula for delivering a net-zero building. Every project requires a unique approach to siting, orientation, climate, occupant use, and ongoing maintenance. And to get it right, a project team must collaborate in non-traditional ways. Rules of thumb don't work, and a performance-based approach is unfamiliar to many industry professionals.

In today's sustainability dialogue, net-zero often focuses only on the energy used during the occupancy phase of a building's lifecycle. But tools are emerging to more holistically assess the environmental impact. Tally is a BIM tool that helps designers track the embodied impacts—those associated with the extraction, manufacture, transportation, and disposal of building materials—providing an opportunity for architects to collaborate with structural engineers to choose systems with a lower embodied carbon footprint.(Rowe, 2020)



(Fig.22) The software's ability to increase design quality (Reducing Embodied Carbon with EC3 and Tally Trim, 2020,8:08)

## Best practice: Transforming Existing Hotels to Net Zero Carbon

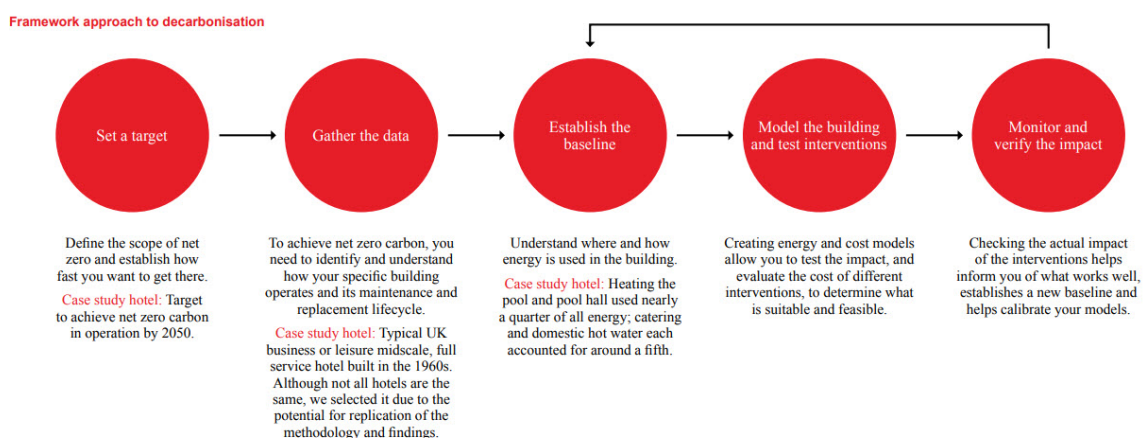
The project titled “Transforming Existing Hotels to Net Zero Carbon” intends to put Arup’s enduring set of principles into practice. Two of these values are particularly significant in their eyes: At the core of their collaborative effort is the concept of “Total Design,” which highlights the need of teamwork in attaining the greatest results. To achieve net zero carbon emissions, designers and engineers must be acknowledged for their essential role in upending the status quo. The term “social usefulness” refers to this.

### Embodied impacts

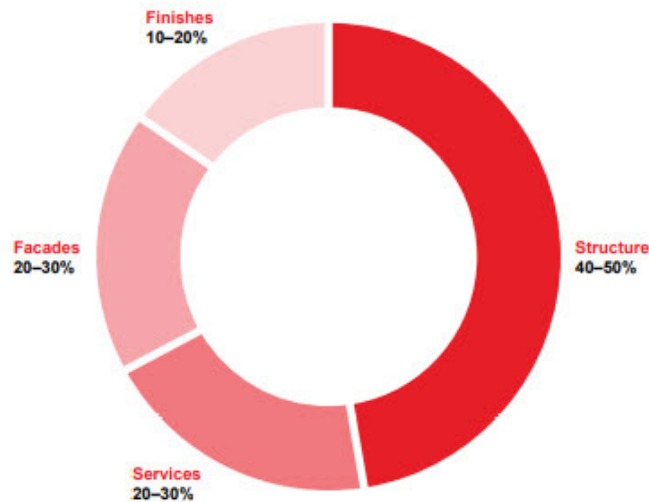
“Embodied carbon makes up between 30% and 70% of a typical building’s total lifecycle emissions. Hotels are constructed of materials extracted from the ground or (in the case of timber) grown, transported to a facility to be processed, transported again (perhaps numerous times) to be fabricated, transported to site and craned into place. Every step of this activity produces carbon emissions” (Transforming Existing Hotels to Net Zero Carbon,

### Location, orientation

“A hotel’s location and orientation impact its carbon footprint. Climate, weather and exposure all play their part, as does the carbon intensity of the energy network. The case study hotel is located near London, in the south of England. The main blocks housing the guestrooms are primarily arranged along a north west / south east axis. Guestrooms are suitably sized and configured for natural ventilation and daylight penetration. The depth to height ratios of between 2 and 2.5 metres promote single-sided ventilation. The rest of the building is deep plan, with no particular orientation. The deep plan nature of the back of house and front of house areas makes it more difficult to introduce daylight and natural ventilation” (Transforming Existing Hotels to Net Zero Carbon, 2021, p.21).



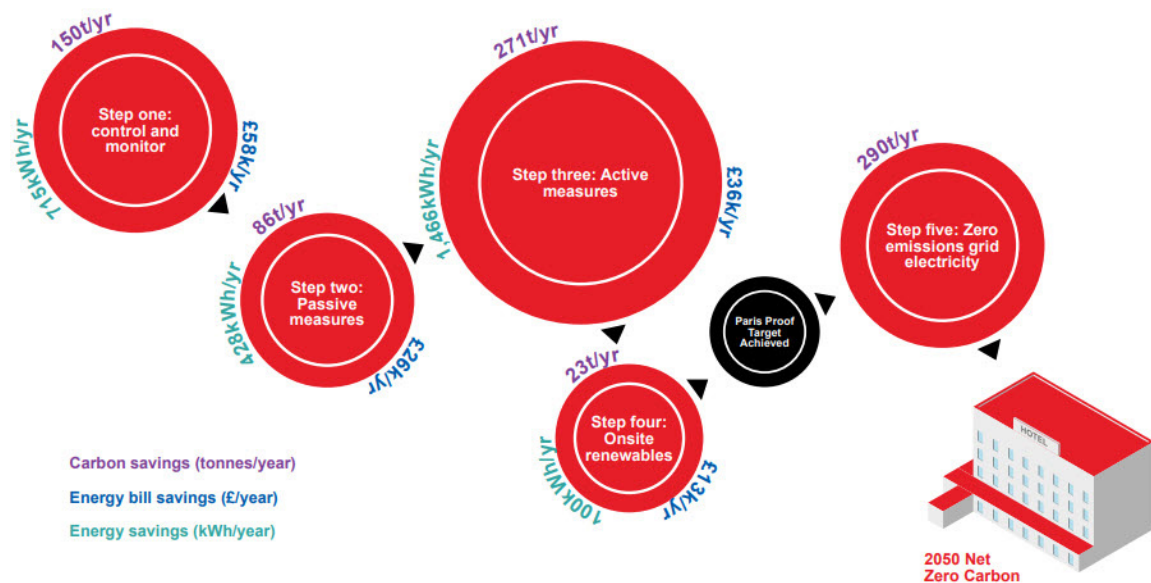
(Fig.23) Framework approach to Decarbonization (Transforming Existing Hotels to Net Zero Carbon, 2021).



(Fig.24) The split of embodied carbon on a hotel varies by project (Transforming Existing Hotels to Net Zero Carbon, 2021,p.18).

### Plotting the path to the target

“It illustrates the estimated carbon impact of each intervention package. A timeline could be designed to align with the lifecycle replacement point for each system, as shown in the previous section. The building is estimated to achieve the previously defined energy use intensity target. In a real scenario, this timeline should remain under regular review with the relevant stakeholders. The timings of each intervention would also consider other factors, such as the impact on hotel operations and further investigation into the anticipated lifespan of the hotel elements.” (Transforming Existing Hotels to Net Zero Carbon, 2021,p.23).



(Fig.25) an optimal path to net zero carbon based on an assessment of carbon reduction, cost, refurbishment cycle and materials/systems interdependencies (Transforming Existing Hotels to Net Zero Carbon, 2021,p.11).

## **Alternative design for the AR interview**

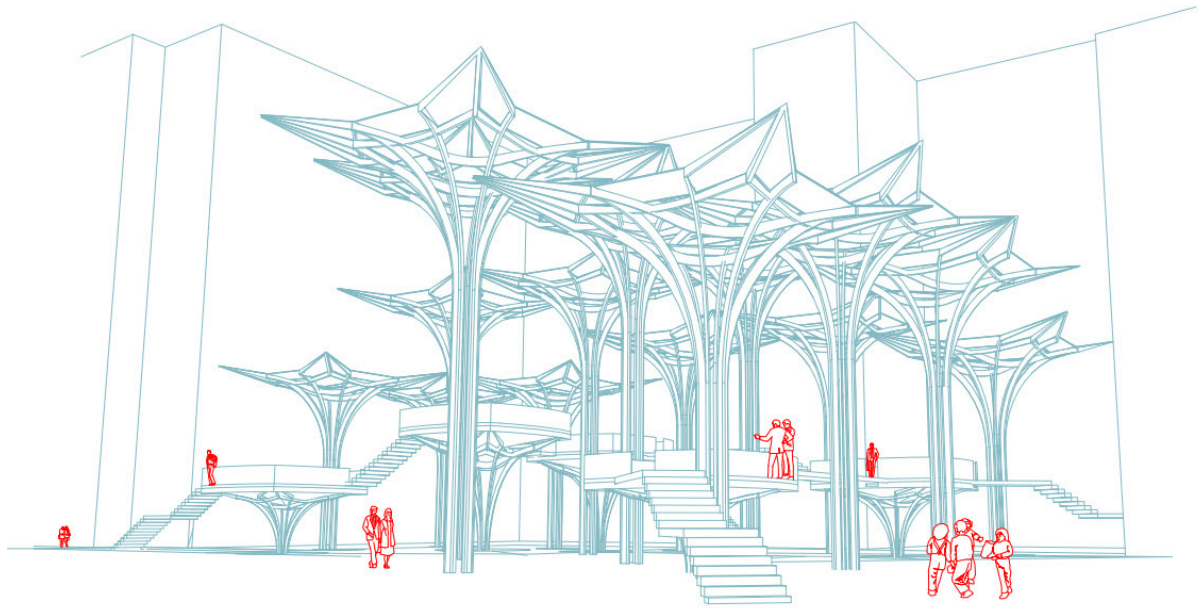
In order to create the House of Statics for the future, there is collaboration between five architecture firms. In light of their research and expertise, they have plans and points of view for each project phase. Thus, we have chosen to concentrate on the area that is needed to be considered to complete and advance the project. With this in mind, we are thinking about creating a portion of the project's landscape in the direction of low-carbon design to prepare it for the 2050's net-zero future.

The first step in creating a low-carbon project could be selecting low-carbon materials like local wood and using less of them as possible. We also think about carbon offsets to decrease the project's carbon footprint, such as installing PV panels and green spaces. Due to the different function and design features, we explore two alternatives while taking this factor into account.

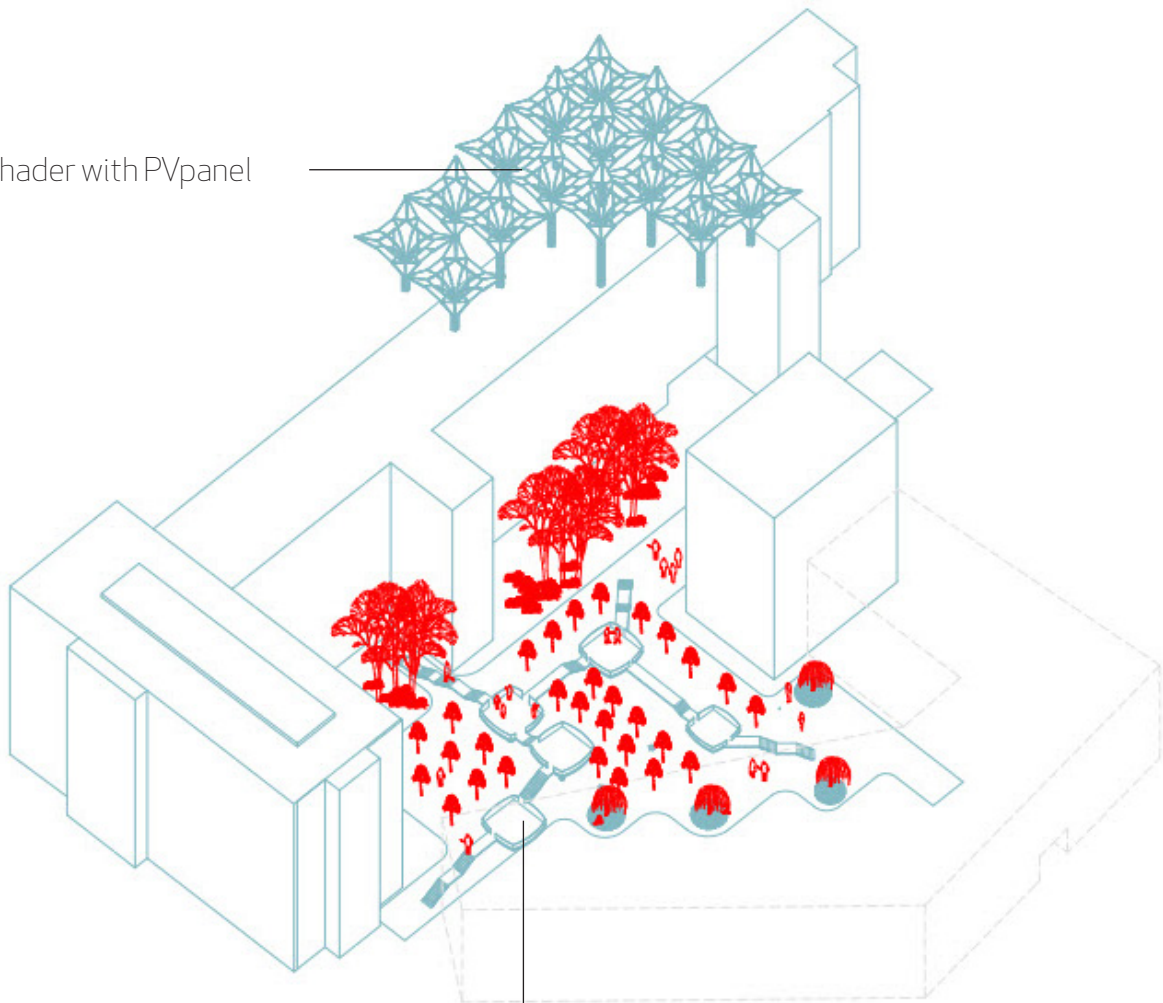
In the first option, we take into account a space as a place for gathering in an open gallery that is both cultural and social and in the second, we focus on green activities like biking and take into account an open place for gathering. So, using these options, we could interview people as part of the design process.

For the interview, we use Augmented Reality to make the project as realistic as possible so that respondents can see it in reality and share their ideas while also being able to see it in a diagram and visualization.

## Option 1



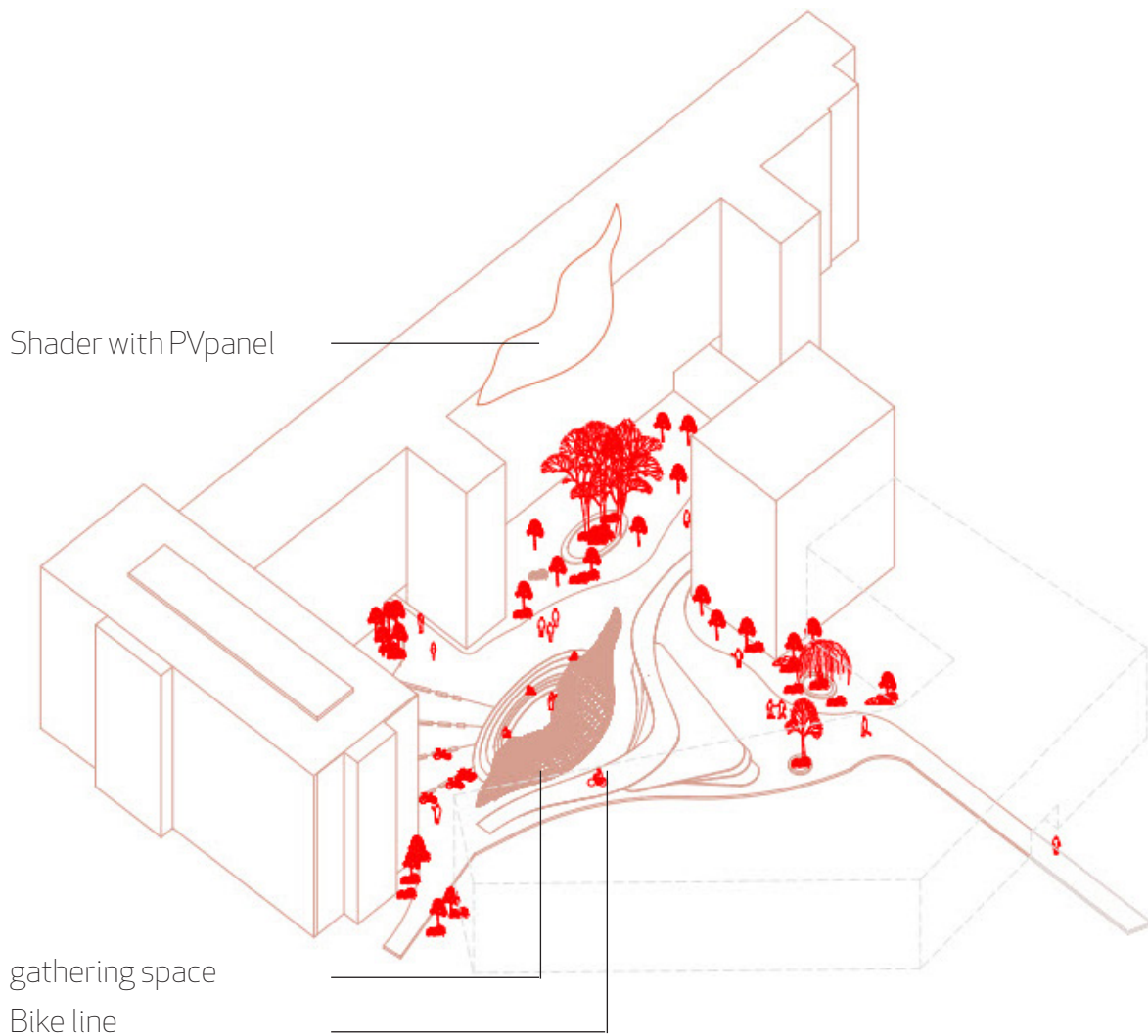
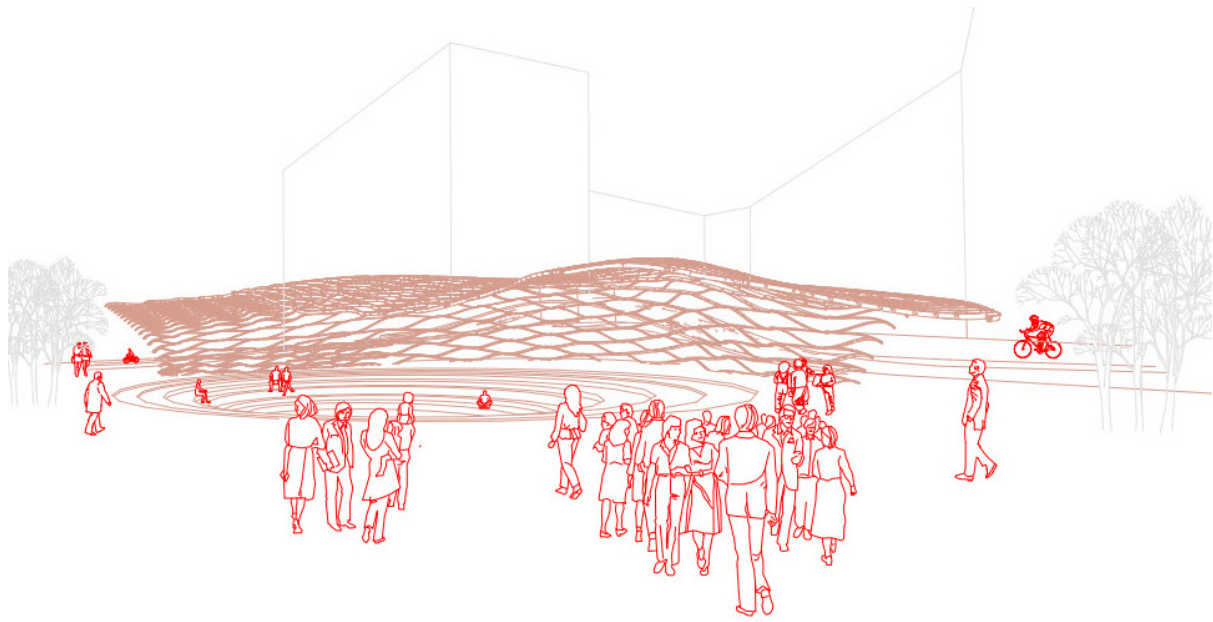
Shader with PVpanel



Open space gallery and gathering space

(Fig.26)The first design option that focuses on creating photovoltaic panels for energy production and outdoor artistic social spaces (Elaborated by author)

## Option 2



(Fig.27)The second design option is to create roofed collective spaces and bike paths as green paths and revive existing functions (Elaborated by author)

## **Alternative comparison with Tally in Revit**

According to "Tally" software report (2022), the following provides a description of terms and methods associated with the use of Tally to conduct life cycle assessment for construction works and construction products. Tally methodology is consistent with LCA standards ISO 14040-14044, ISO 21930:2017, ISO 21931:2010, EN 15804:2012, and EN 15978:2011.

Tally utilizes a custom designed LCA database that combines material attributes, assembly details, and architectural specifications with environmental impact data resulting from the collaboration between KieranTimberlake and thinkstep. LCA modeling was conducted in GaBi 8.5 using GaBi 2018 databases and in accordance with GaBi databases and modeling principles.

The analysis accounts for the full cradle to grave life cycle of the design options studied across all life cycle stages, including material manufacturing, maintenance and replacement, and eventual end of life. Optionally, the construction impacts and operational energy of the building can be included within the scope. Product stage impacts are excluded for materials and components indicated as existing or salvaged by the modeler. The modeler defines whether the boundary includes or excludes the flow of biogenic carbon, which is the carbon absorbed and generated by biological sources (e.g. trees, algae) rather than from fossil resources.

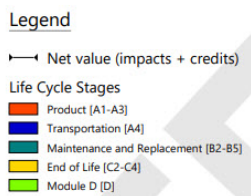
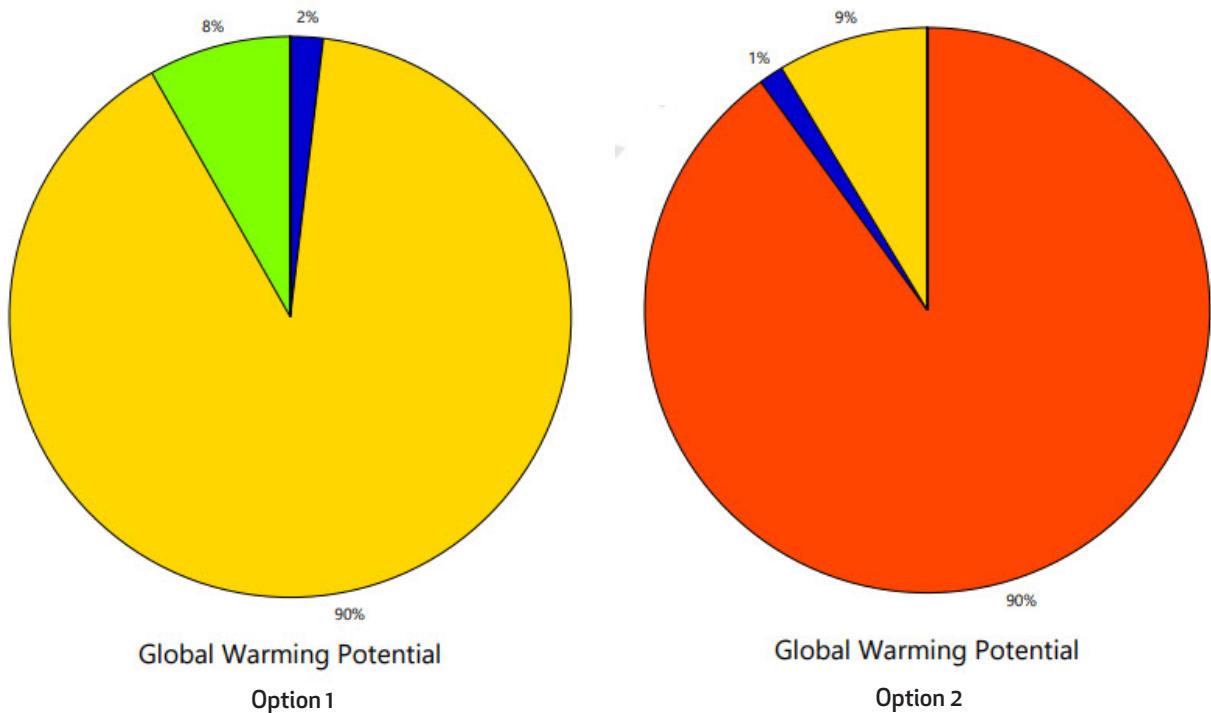
### **Global Warming Potential (GWP) kg CO<sub>2</sub>eq**

According to "Tally" software report (2022), a measure of greenhouse gas emissions, such as carbon dioxide and methane. These emissions are causing an increase in the absorption of radiation emitted by the earth, increasing the natural greenhouse effect. This may, in turn, have adverse impacts on ecosystem health, human health, and material welfare.



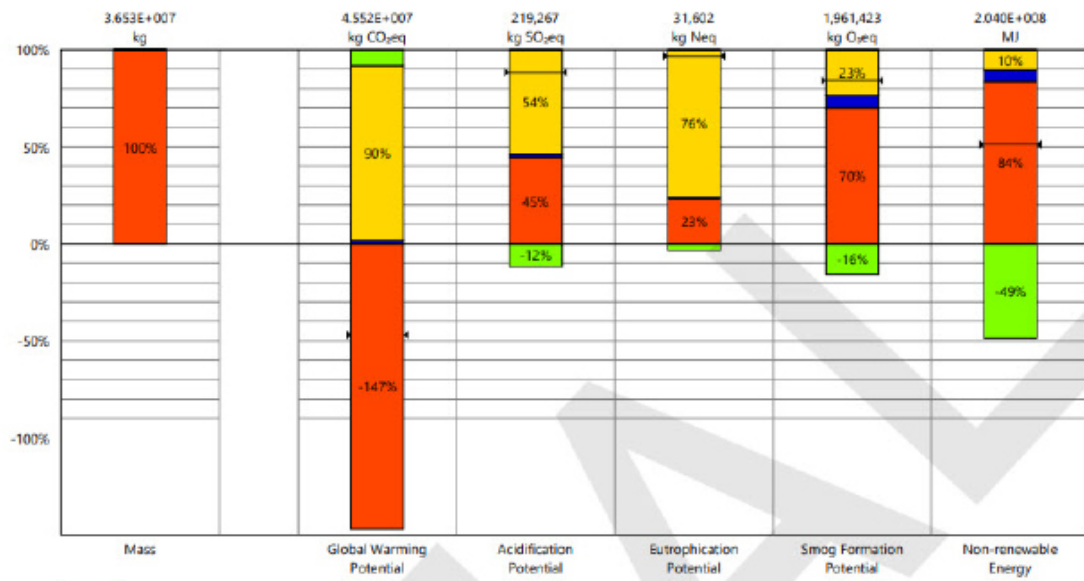
PRODUCT	CONSTRUCTION	USE	END-OF-LIFE	MODULE D
A1. Extraction A2. Transport (to factory) A3. Manufacturing	A4. Transport (to site) A5. <i>Construction Installation</i>	B1. Use B2. Maintenance B3. Repair B4. Replacement B5. Refurbishment  B6. <i>Operational energy</i> B7. Operational water	C1. Demolition C2. Transport (to disposal) C3. Waste processing C4. Disposal	D. Benefits and loads beyond the system boundary from: 1. Reuse 2. Recycling 3. Energy recovery

(Fig.28) According to "Tally" software report (2022), Life-Cycle Stages as defined by EN 15978. Processes included in Tally modeling scope are shown in bold. Italics indicate optional processes.



(Fig.29) Exported from Tally plugin which could show the first option has more global warming potential in global warming in the end of life and the option 2 has more potential in the product phase(Elaborated by author)

## Results per Life Cycle Stage



### Legend

← Net value (impacts + credits)

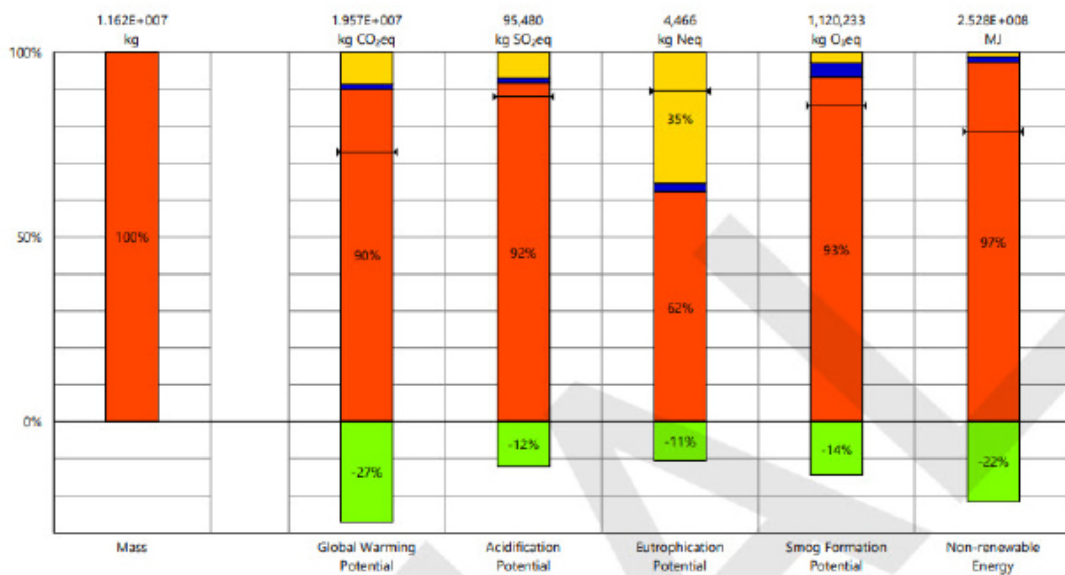
#### Life Cycle Stages

- Product [A1-A3]
- Transportation [A4]
- Maintenance and Replacement [B2-B5]
- End of Life [C2-C4]
- Module D [D]

Option 1

(Fig.30) Exported from Tally plugin which show in the first option the net value is negative (Elaborated by author)

## Results per Life Cycle Stage



### Legend

← Net value (impacts + credits)

#### Life Cycle Stages

- Product [A1-A3]
- Transportation [A4]
- Maintenance and Replacement [B2-B5]
- End of Life [C2-C4]
- Module D [D]

Option 2

(Fig.31) Exported from Tally plugin which show in the Second option the net value is Positive (Elaborated by author)

<b>Environmental Impact Totals</b>	<b>Product Stage [A1-A3]</b>	<b>Construction Stage [A4]</b>	<b>Use Stage [B2-B5]</b>	<b>End of Life Stage [C2-C4]</b>	<b>Module D [D]</b>
Global Warming (kg CO <sub>2</sub> eq)	-6.692E+007	846,369	11,476	4.093E+007	3,736,882
Acidification (kg SO <sub>2</sub> eq)	97,863	3,922	25.59	117,456	-25,600
Eutrophication (kg Neq)	7,294	319.3	2.761	23,985	-1,040
Smog Formation (kg O <sub>3</sub> eq)	1,371,457	129,591	721.6	459,654	-310,234
Ozone Depletion (kg CFC-11eq)	1.086	2.899E-008	1.650E-007	3.214E-007	-5.761E-005
Primary Energy (MJ)	7.171E+008	1.231E+007	298,815	2.260E+007	-1.726E+008
Non-renewable Energy (MJ)	1.705E+008	1.201E+007	293,030	2.121E+007	-9.946E+007
Renewable Energy (MJ)	5.458E+008	297,624	6,054	1,382,487	-7.312E+007
<b>Environmental Impacts / Area</b>					
Global Warming (kg CO <sub>2</sub> eq/m <sup>2</sup> )	-19,120	241.8	3.279	11,694	1,068
Acidification (kg SO <sub>2</sub> eq/m <sup>2</sup> )	27.96	1.121	0.00731	33.56	-7.31
Eutrophication (kg Neq/m <sup>2</sup> )	2.084	0.09124	7.888E-004	6.853	-0.2972
Smog Formation (kg O <sub>3</sub> eq/m <sup>2</sup> )	391.8	37.03	0.2062	131.3	-88.6
Ozone Depletion (kg CFC-11eq/m <sup>2</sup> )	3.103E-004	8.282E-012	4.715E-011	9.181E-011	-1.646E-008
Primary Energy (MJ/m <sup>2</sup> )	204,874	3,517	85.38	6,457	-49,311
Non-renewable Energy (MJ/m <sup>2</sup> )	48,702	3,432	83.72	6,060	-28,416
Renewable Energy (MJ/m <sup>2</sup> )	155,956	85.04	1.730	395.0	-20,892

#### Option 1

(Fig.32)Exported from Tally plugin which show in the first option the environmental impact of Co2 in total and in area in the product stage is negative(Elaborated by author)

<b>Environmental Impact Totals</b>	<b>Product Stage [A1-A3]</b>	<b>Construction Stage [A4]</b>	<b>Use Stage [B2-B5]</b>	<b>End of Life Stage [C2-C4]</b>	<b>Module D [D]</b>
Global Warming (kg CO <sub>2</sub> eq)	1.761E+007	276,118	0	1,687,421	-5,294,421
Acidification (kg SO <sub>2</sub> eq)	87,608	1,279	0	6,593	-11,485
Eutrophication (kg Neq)	2,778	104.2	0	1,583	-469
Smog Formation (kg O <sub>3</sub> eq)	1,045,451	42,277	0	32,505	-161,945
Ozone Depletion (kg CFC-11eq)	-0.005583	9.457E-009	0	3.744E-008	0.03835
Primary Energy (MJ)	2.701E+008	4,015,336	0	3,171,502	-5.341E+007
Non-renewable Energy (MJ)	2.459E+008	3,919,251	0	2,966,461	-5.436E+007
Renewable Energy (MJ)	2.446E+007	97,096	0	203,611	930,408
<b>Environmental Impacts / Area</b>					
Global Warming (kg CO <sub>2</sub> eq/m <sup>2</sup> )	5,031	78.89	0	482.1	-1,513
Acidification (kg SO <sub>2</sub> eq/m <sup>2</sup> )	25.03	0.3656	0	1.884	-3.28
Eutrophication (kg Neq/m <sup>2</sup> )	0.7938	0.02976	0	0.4524	-0.134
Smog Formation (kg O <sub>3</sub> eq/m <sup>2</sup> )	298.7	12.08	0	9.287	-46.3
Ozone Depletion (kg CFC-11eq/m <sup>2</sup> )	-1.595E-006	2.702E-012	0	1.070E-011	1.096E-005
Primary Energy (MJ/m <sup>2</sup> )	77,161	1,147	0	906.1	-15,259
Non-renewable Energy (MJ/m <sup>2</sup> )	70,262	1,120	0	847.6	-15,532
Renewable Energy (MJ/m <sup>2</sup> )	6,989	27.74	0	58.17	265.8

#### Option 2

(Fig.33)Exported from Tally plugin which show in the Second option the environmental impact of Co2 in total and in area in the product stage is positive(Elaborated by author)

## Conclusion

We use the Tally plugin to evaluate the two options, analyze them, and then decide which material to employ and how it would affect the environment. In this analyze we consider the situation that the transportation in each stage has less impact on choosing the material to focus more on choosing which type of material.

In this analyze we focus just on the "Global warming potential" which could show the environmental impact of Co2 and it is obvious that choosing different material which has less impact on global warming could have a negative environmental impact on the other factor of the environment.

In the first alternative, we utilize wood as the main component beide glass and metal for handrail and detail design. To create a tall shader that could let sunlight into the space while, at the same time, using this shader for the PV panel, on the other hand, the three under the shader could receive sunlight and so have an impact on carbon emissions as a producer of co2.

With considration of the global warming potential in evaluating the effects of carbon and other gases on the environment, we reach the the result in the first alternative to negetive the Net value (Fig.30). In this option wood, as an environmentally friendly material, has less environmental impact in the Product [A1-A3] phase (Fig.29), making it an excellent solution to lessen the impact of another material in this phase. However, End of Life [C2-C4] has a 90% greater global warming potential in this alternative (Fig.29).

For the second alternative, we use wood as a base material for the shader of the gathering space and the other hand concrete for the bike ramp. In this alternative, with considration of the use of concrete the Net value is positive (Fig.31) and 90 percent of this Global warming potential is for the product phase (Fig.29).

It is interesting to say that using wood more than other materials like glass, concrete or metal has a more positive effect on the reuse recycle and energy recovery beyond the system boundary as we could see in module D. As we could see in option 1 we have 8 present Module D (Fig.29) in compare to option 2 that we could see this beneficial impact is negative.



Architecture 2030, NBI (New Buildings Institute), and RMI (Rocky Mountain Institute). 2016. "Zero Net Carbon (ZNC) Building." Santa Fe, NM: Architecture 2030. [https://architecture2030.org/wp-content/uploads/2018/10/ZNC\\_Building\\_Definition.pdf](https://architecture2030.org/wp-content/uploads/2018/10/ZNC_Building_Definition.pdf).

AT Editor. (2018, March 6). Blue House Yard. Architecture Today. Retrieved September 2, 2022, from <https://architecturetoday.co.uk/blue-house-yard/>

Becqué, R.; Weyl, D.; Stewart, E.; Mackres, E.; Jin, L.; Shen, X. (2019) Working Paper Accelerating Building Decarbonization: Eight Attainable Policy Pathways to Net Zero Carbon Buildings for All; World Resources Institute: Washington, DC, USA.

C40 Networks. 19 Global Cities Commit to Make New Buildings "Net-Zero Carbon" by 2030. Available online: [https://www.c40.org/press\\_releases/global-cities-commit-to-make-new-buildings-net-zero-carbon-by-2030](https://www.c40.org/press_releases/global-cities-commit-to-make-new-buildings-net-zero-carbon-by-2030) (accessed on 2 September 2022).

Causone, F.; Tatti, A.; Alongi, A. (2021) From Nearly Zero Energy to Carbon-Neutral: Case Study of a Hospitality Building. *Appl. Sci.*, 11, 10148. <https://doi.org/10.3390/app112110148>

C40 Networks. 19 Global Cities Commit to Make New Buildings "Net-Zero Carbon" by 2030. Available online: <https://www.c40.org/news/neighbourhood-action-critical-to-meeting-net-zero-targets> (accessed on 2 September 2022).

Pan, W. (2013) Zero Carbon Buildings: Contexts, Challenges and Strategies. *Build. J.* 71–73. Available online: [http://www.building.hk/forum/2013\\_0131zcb.pdf](http://www.building.hk/forum/2013_0131zcb.pdf) (accessed on 2 September 2022).

McLeod, R.S., Hopfe, C.J. and Rezgui, Y. (2012) An investigation into recent proposals for a revised definition of zero carbon homes in the UK. *Energy Policy*, 46, 25–35.

European Commission. A Roadmap for Moving to a Competitive Low Carbon Economy in 2050; European Commission: Brussels, Belgium, 2011.

Na, M. (2018, September 4). The Poblenou Superblock : Barcelona is Going Pedestrian! Suitelife. Retrieved September 2, 2022, from <https://suitelife.com/barcelona-real-estate/the-poblenou-superblock/>

United Nations (2020) Climate Action Pathway Human Settlements. Retrieved from [https://unfccc.int/sites/default/files/resource/ExecSumm\\_HS\\_0.pdf](https://unfccc.int/sites/default/files/resource/ExecSumm_HS_0.pdf)

Net-zero buildings: Where do we stand? (2021). Arup. <https://www.arup.com/perspectives/publications/research/section/net-zero-buildings-where-do-we-stand>

Limited, A. (2020, February 1). Aerial view of Vertical Forest, Milan, Italy and Garibaldi Station. Stock Photo. Alamy. Retrieved September 10, 2022, from <https://www.alamy.com/stock-photo/vertical-forest-milan.html>

Transforming Existing Hotels to Net Zero Carbon. (2021). Arup. <https://www.arup.com/perspectives/publications/research/section/transforming-existing-hotels-to-net-zero-carbon>

Reduce embodied carbon in building construction with EC3. (2019, December 11). YouTube. Retrieved September 11, 2022, from <https://www.youtube.com/watch?v=XZNMLLrLuVc>

Reducing Embodied Carbon with EC3 and Tally Trim. (2020, January 20). YouTube. Retrieved September 11, 2022, from <https://www.youtube.com/watch?v=6cfGWvKt8xw>

Simonen, K. (2013, April 1). Q7: Embodied Energy vs. Embodied Carbon. SEI Sustainability Committee. Retrieved September 11, 2022, from <http://structureandsustainability.blogspot.com/2013/04/lca-q7-embodied-energy-vs-embodied.html>

European Committee for Standardization. (2022). Sustainability of construction works - Assessment of buildings - Part 3: Framework for the assessment of social performance. <https://standards.iteh.ai/catalog/standards/sist/db2b432e-21cc-4e0c-80a8-cbc76c7e182b/sist-en-15643-3-2012>

Rowe, J. (2020, February 13). BIM and the Net-Zero Building. Retrieved September 11, 2022, from <https://www.linkedin.com/pulse/bim-net-zero-building-jonathan-rowe/>

Net Zero Carbon Buildings: Three Steps to Take Now. (2020). Arup. <https://www.arup.com/perspectives/publications/research/section/net-zero-carbon-buildings-three-steps-to-take-now>

Tally | Learn | What is LCA? (n.d.). Tally. Retrieved September 12, 2022, from <https://choosetally.com/whatis-lca/>

Zero Net Carbon (ZNC): A Definition – Architecture 2030. (n.d.). <https://architecture2030.org/zero-net-carbon-a-new-definition/>

Canadian Green Building Council. (2022, October 5). Zero Carbon Building Standards. Canada Green Building Council (CAGBC). <https://www.cagbc.org/our-work/certification/zero-carbon-building-standard/>

World Resources Institute | Making Big Ideas Happen. (n.d.). World Resources Institute. <https://www.wri.org/>

RESOURCES – ZERO Code. (n.d.). <http://zero-code.org/resources/>

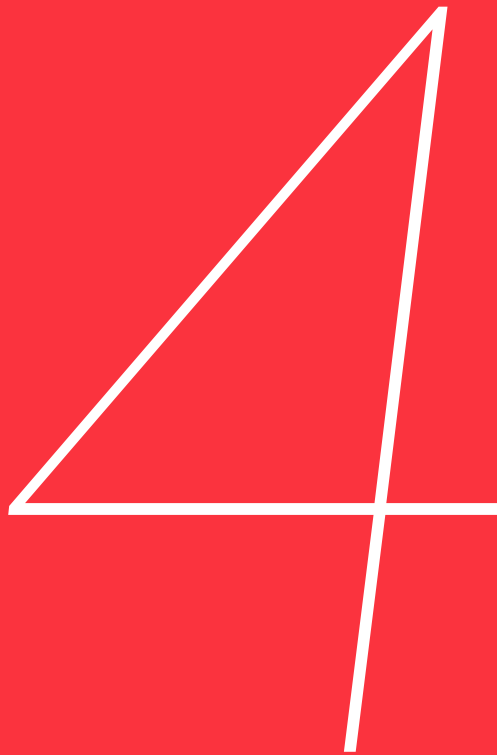
Saush, A. (2022, April). The Role of Carbon Offsets in the Net-Zero Journey. Conference-board. Retrieved December 31, 2022, from <https://www.conference-board.org/topics/climate-change/the-role-of-carbon-offsets-in-the-net-zero-journey>

Net Zero Carbon Guide. (n.d.). What About Carbon Offsetting? <https://www.netzerocarbonguide.co.uk/guide/early-decisions/what-about-carbon-offsetting>

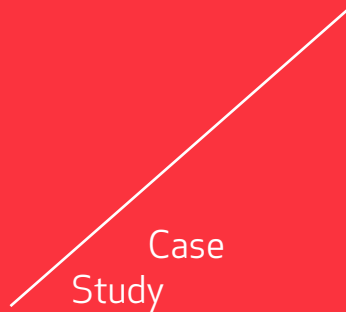
IPCC Intergovernmental Panel on Climate Change. (n.d.). IPCC. <https://www.ipcc.ch/>

A Roadmap for moving to a competitive low carbon economy in 2050. (2011). In eur-lex.europa.eu. Retrieved January 1, 2023, from <https://eur-lex.europa.eu/search.html?scope=EURLEX&text=lexuriserv&lang=en&type=quick&qid=1672588185754>

“Choose Tally.” (2022). Methods for Using Tally Software. Retrieved from <https://choosetally.com/methods/>



Ch.



Everyone is of the opinion that something very special is being created here. It is a successful example of urban development from below

Senator Daniel Wesener (Uhlig, 2022)

"It should be a quarter that fits together and in which urban life will take place,"

Ephraim Gothe (SPD), district councilor in Mitte (Uhlig, 2022)







Project's district:  
the history and feathers of  
Alexanderplatz

Alexanderplatz was the main center of Berlin, the old center. When the unification of Germany came, and with it the unification of Berlin, Alexanderplatz came back to the fore as the center of the city. What should one do with such a place and where does one turn for inspiration? Alexanderplatz has been completely transformed since the 1930s when the famous schemes by Mies van der Rohe, the Luckhardt brothers, Behrens, Poelzig, and Mendelsohn were proposed. Many famous architects worked on this site during the twenties and thirties but nothing much materialized because history took another course. Now, another surprise turn of history has come with the unification of Berlin. (Libeskind, 1995)

A large public square in Berlin's eastern part, Alexanderplatz was rebuilt in the 1960s as an exemplar of socialist planning. In the 1990s, it became a problem for urban planners and ordinary Berliners. Drawing on ethnographic material, the author offers a multifaceted account of how disorder is experienced, governed, and materialized in Alexanderplatz. Talk about disorder has provided a way of discussing the dislocations accompanying unification and the vanishing of a socialist ideal. But it may also be understood as a commentary on the perceived failures of government and the social. These discourses involve two distinct conceptions of "society" and "the social." One is a familiar notion of the social as a problem space; the other is a utopian notion of society as an unattained ideal, characteristic of state socialism. (Weszkalnys, 2007)

The square became the city's main shopping center after the construction of the central market hall in 1886 and the Tietz department store between 1904 and 1911. Alexanderplatz is also a well-known filming location. It rose to literary prominence with Alfred Döblin's 1929 novel *Berlin Alexanderplatz*.

Prussian King Friedrich Wilhelm III ordered the market to be named in honor of the Russian Tsar Alexander I, who visited Berlin in 1805. It was located outside the city's fortifications, but the construction of Alexanderplatz Stadtbahn (the train station) and the Tietz department store in the early 1900s garnered it more attention and visitors.

Along with nearby Potsdamer Platz, Alexanderplatz was the nightlife hub during the roaring 1920s. The 1929 novel *Berlin Alexanderplatz* (with subsequent films by Piel Jutzi's and Rainer Werner Fassbinder) documents that time period of the Weimar Republic in glorious detail.

During World War II, Alexanderplatz's many underground lines became mass bunkers to protect people from the bombings. Tours explore these abandoned bunkers and cover this troubled time in history. (*Berlin's Alexanderplatz: The Complete Guide*, 2019)

Alexanderplatz is Berlin's eastern centre and is an important transport junction – for the S-Bahn, U-Bahn, regional trains, trams and buses. It also has a great many great tourist attractions within walking distance, making it the ideal starting point for a sightseeing tour of Berlin. (Alexanderplatz, n.d.)

Largely destroyed in the Second World War, Alexanderplatz did not take its current shape until the 1960s. With the square converted to a pedestrian zone, it is surrounded by busy multiple-lane roads. It was during this time that the big department store then known as Centrum was built, along with the adjacent Alex-Passagen, the Weltzeituhr (world clock), the Brunnen der Völkerfreundschaft (Fountain of International Friendship) and the Fernsehturm – East Berlin's famous television tower. After the square was completed in 1971, it was often the venue for large events such as the celebrations for the 25th anniversary of the GDR<sup>1</sup>. (Alexanderplatz, n.d.)

1. The German Democratic Republic (GDR) regarded itself as the first Socialist state on German soil, the governmental structure of which was to be based on the principles of 'democratic centralism', in other words on the principles established by Vladimir Ilyich Lenin for the leadership of Communist parties. The representative assembly of the GDR, the Volkskammer or People's Chamber, however, remained an exceptional phenomenon in the development of German parliamentary democracy. The process of creating the People's Chamber ran parallel to the creation of the German Bundestag, and it was conceived as an alternative model to that of the Bundestag, although it was unable to dispense entirely with the conventions of liberal constitutional parliamentary practice (Leichsenring, n.d.).

## House of Statistics (HdS)<sup>1</sup>: Berlin's controversial project

The GDR's central statistics administration, which was in responsibility of supplying data and statistical analysis of the nation's economic reproduction process, had offices in three different structures up until 1990. The information acquired served as the foundation for the GDR's five-year plans. The HdS, which consisted of a total of seven multi-story buildings, had low-rise structures that were dedicated to the library, the main archive, and the data center. The building complex was bought by the federal government following the demise of the GDR.

After 1990, the HdS operated as the Berlin office of the Federal Commissioner for the Stasi Documents as well as a section of the Federal Statistical Office. Since 2008, the HdS building complex has remained vacant.

In order to encourage the development of the HdS, the artist collective Allianz put a fake building board advertising the establishment of a center for sociocultural purposes on the front of House A in September 2015. This act of intimidation against Berlin studio houses was part of their campaign. The planned demolition was finally put on hold when the House of Statistics concept was launched. In 2016, ZUSammenKUNFT Berlin eG, a cooperative for urban development, was formed to carry out the project.

The initiative's demand for the development of the HdS was detailed in the coalition agreement between the SPD, DIE LINKE, and BÜNDNIS 90/Die Grünen for the 2016–2021 legislative session.

The first agreement for partnership in the Koop5 process was signed in January 2018. From September 2018 to February 2019, a workshop process for urban planning was in progress. In a situation where experts, participants, and representatives of the civil society were present, the strategy allowed Koop5 participants and members of the civil society to interact and participate in the development process alongside planners. The plan's draft by the Teleinternetcafe and Treibhaus was approved without dissent after a protracted discussion.

1. At the intersection of Otto-Braun-Strasse and Karl-Marx-Allee in the Berlin-Mitte area is the 3.2-hectare House of Statistics (HdS) complex. Between 1968 and 1970, East Berlin's city center underwent renovation, which helped to birth the HdS.

The House of Statistics has been empty for 8 years. The condition of the building is difficult due to the fact that the windows were removed by the Federal Agency for Real Estate Tasks in the summer of 2015. The building is no longer maintained and cable thieves are haunting it. Some parts of the interior of the building could be reused. At least the floor plans can be used to save costs. The prerequisite, however, is that action is taken soon. For the cityscape of Berlin, the current state is a dubious thing. Contrary to its name, the House of Statistics is an urban ensemble with six houses ("EIN ANGEBOT AN BERLIN," 2016).

At the same time, the House of Statistics and its surroundings can be seen as a meeting place for three Berlin districts: Mitte, Pankow and Friedrichshain-Kreuzberg. The special location of the House of Statistics at the interface of various social and urban spaces calls for a socially and culturally dynamic and integrating meeting place at this point. Residents, various tenant advisory councils, police section 32, social projects, the central housing association and representatives from politics and administration are represented in the Alexanderplatz initiative ("EIN ANGEBOT AN BERLIN," 2016). Essential for the urban integration of the House of Statistics is the creation of passageways to the residential area by demolishing single-storey parts of the building. This also strengthens the conciseness of the building in the urban space. By integrating open areas into existing green spaces, the building ensemble is integrated into the neighborhood, which is also upgraded as a result. The building composition offers a high potential for later densification, which does not eliminate thoroughfares and green areas ("EIN ANGEBOT AN BERLIN," 2016). The House of Statistics is being used in a new way: by bringing together important public-interest-oriented and non-profit activities under one roof, an outstanding project for the integrative life and work of Berliners, refugees, cultural workers, education, production and civic groups is being created initiatives. The house will represent a central social value: the common good, based on civil society commitment ("EIN ANGEBOT AN BERLIN," 2016). Created at the moment of the so-called "refugee crisis" in 2015, the concept offers answers to various challenges in the context of the social crisis in our society and the gentrification problem in Berlin :

- a) Refugees and other disadvantaged groups take an active part in urban society, in addition to classic integration approaches
- b) There is urgently needed, affordable work space for artists, culture, initiatives and social affairs in the city center
- c) A central, inner-city space that tends towards commercialization and cheap spectacles is being revitalized and profiled as a place for diverse engagement with new and reliable forms of participation.
- d) A building with a reinforced concrete skeleton is converted very cheaply, in the sense of a wise use of the city's physical capital
- e) A model, urban ensemble of existing buildings and new buildings is created, which, in addition to the uses of the House of Statistics, includes subsidized housing and buildings for public uses (such as administration and education). The spatial proximity creates common areas, open areas and joint activities reciprocal, integrative synergies for the users in the house and with the residents in the immediate vicinity. A meeting place for the entire city society is created through numerous usage concepts that are also open to the public ("EIN ANGEBOT AN BERLIN," 2016).

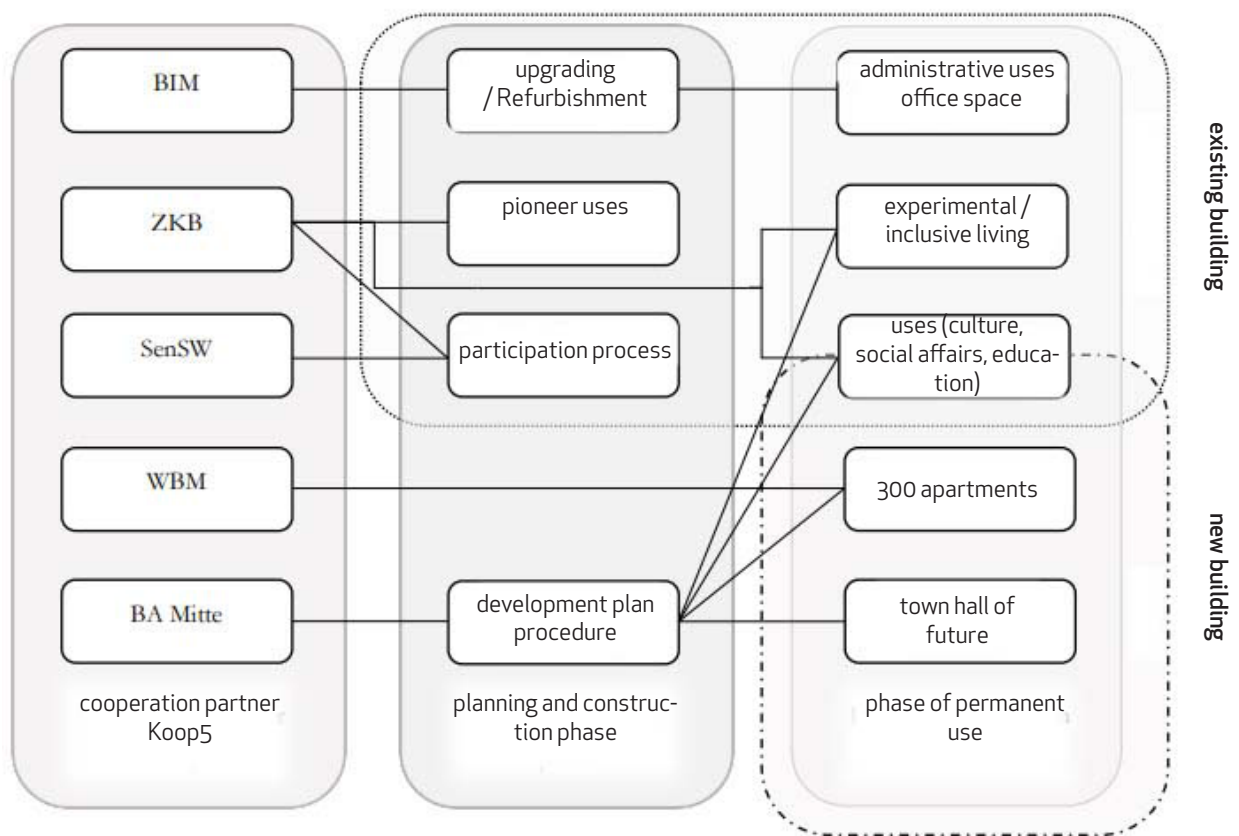


("EIN ANGEBOT AN BERLIN," 2016)

## How Collaborative partners, obligations

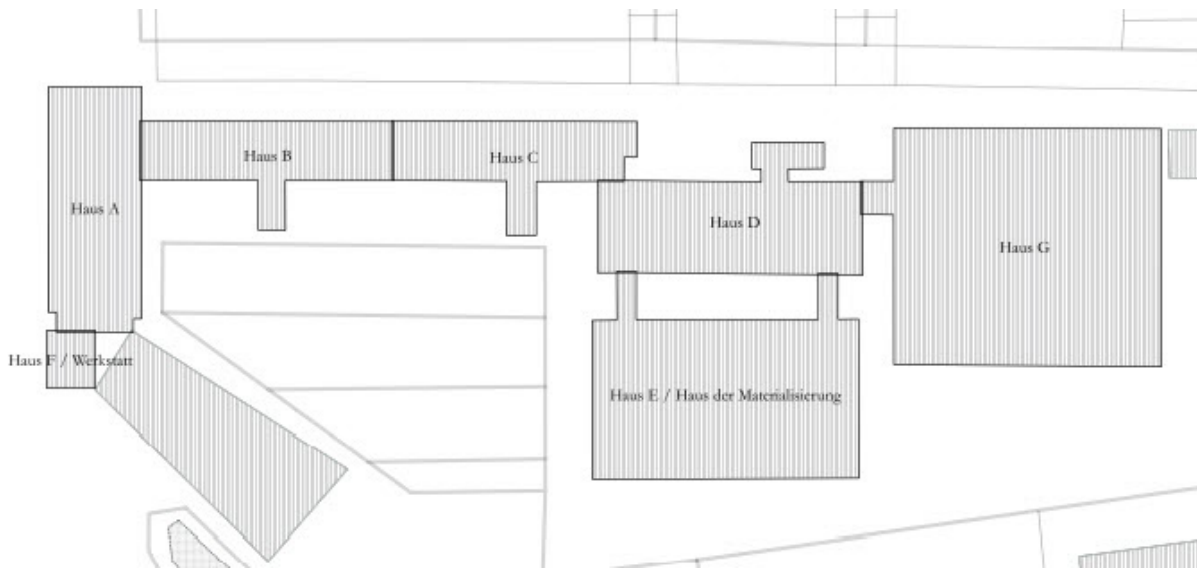
According to the Mitte district office, by the end of 2024 the House of Statistics is to be converted into a modern administrative location with the town hall of the future, but also space for education, culture and living (Uhlig, 2022).

Since January 2018, the so-called Koop5 has been working on the development of the House of Statistics for the common good. The five cooperation partners – Senate Department for Urban Development, Building and Housing, the Berlin-Mitte District Office, the state-owned companies WBM Wohnungsbaugesellschaft Berlin-Mitte mbH and BIM Berliner Immobilienmanagement GmbH, and ZUSammenKUNFT Berlin eG – will jointly create space for art, culture, social affairs and Realize education, affordable housing, a new town hall for Mitte as well as administration uses in the existing buildings and a new 65,000 m<sup>2</sup> building on the Haus der Statistics site (Koop5, 2022).



(Fig.27) COOPERATION PARTNERS, TASKS AND DEVELOPMENT PROJECTS (Sebastian, 2020,P.35)





(Fig.28) HOUSE OF STATISTICS, ORIGINAL LAYOUT (Sebastian, 2020,P.36)



(Fig.29) HOUSE OF STATISTICS, FUTURE LAYOUT (Sebastian, 2020,P.36)

These are the current (original floor plan) and the future floor plan of the quarter House of Statistics juxtaposed in a template-like manner. is based on the design of the planning community Teleinternetcafe and Treibhaus and shows where the new building projects of the WBM and the new town hall of the Berlin-Mitte district office (town hall of the future) are to be built. In addition, the projects of ZKB and BIM are located in urban space.



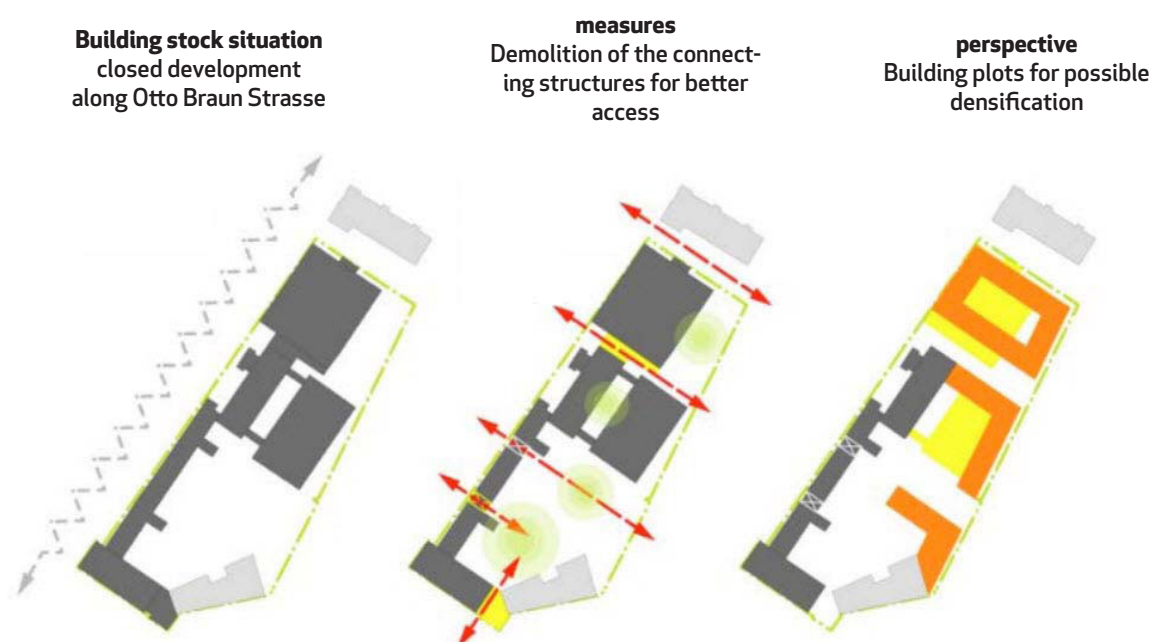
Future  
design

(Publikationen, 2021)

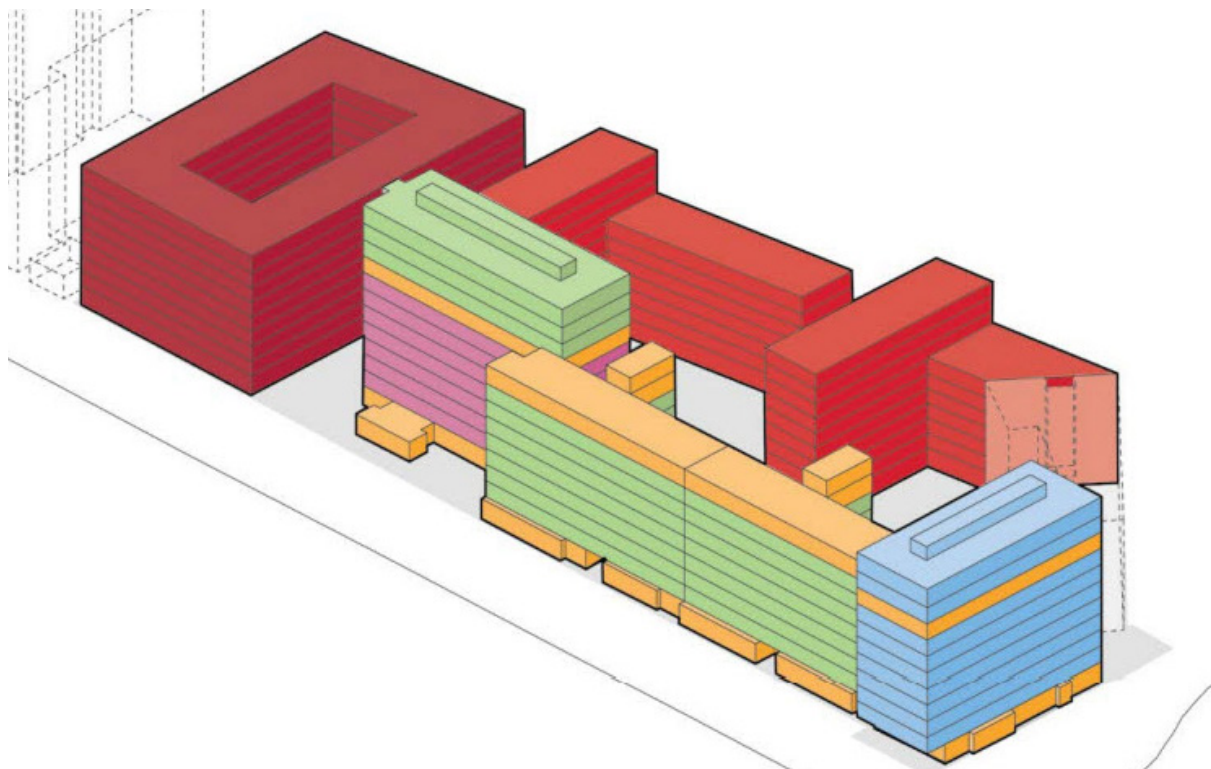
The construction work on the House of Statistics has officially begun and the construction progress is becoming increasingly visible to Berliners. After years of planning, coordination and an extensive pollutant clean-up, during which the building was completely gutted by BIM Berliner Immobilienmanagement GmbH (BIM), the general contractor “Arge Haus der Statistics”, consisting of Ed. Züblin AG and HOCHTIEF Infrastructure GmbH, the upcoming construction measures (HdS, 2022).

In the first construction phase, the construction site will be separated from the public areas by a fence and the construction site will be prepared for future logistics. For this purpose, driveways are built and construction containers set up. At the same time, the areas are being prepared for later construction work. From June, two large tower cranes will complement the cityscape at Alexanderplatz with its numerous large construction sites at the House of Statistics. In June, the dismantling of the polluted façade elements will also begin. First on Otto-Braun-Straße and from autumn on the part of the building facing Karl-Marx-Allee (House A). Civil engineering and pipeline work will take place in parallel in the backyard from July 2022. Among other things, trenches are manufactured for the infiltration of the rainwater. The report (“EIN ANGEBOT AN BERLIN,” 2016) that the companies released in 2016 provides the foundation for the text that follows.

Essential for the urban integration of the House of Statistics is the creation of passages to the residential area by demolishing single-storey parts of the building. This also strengthens the conciseness of the building in the urban space. By integrating open areas into existing green spaces, the building ensemble is integrated into the neighborhood, which is also upgraded as a result. The building composition offers a high potential for later densification, which does not eliminate thoroughfares and green areas .



(Fig.30) Creating access in building blocks (“EIN ANGEBOT AN BERLIN,” 2016)



**12%** ART AND PRODUCTION  
Workspaces for cultural workers  
House A: 10,670 sqm

**8%** CULTURE AND ENCOUNTERS  
Community and event rooms  
House A: 1,690 sqm  
House B/C: 3,540 sqm  
House D: 2,230 sqm  
total: 7,460 sqm

**16%** INTEGRATED LIVING  
Berliners, refugees, students,  
seniors etc.  
House B/C: 12,390 sqm  
House D: 3,350 sqm  
total: 15,740 sqm

**31%** PUBLIC USE  
New building 29,135 sqm

**24%** STATE-OWNED HOUSING COMPANY  
New construction / social housing  
House 1: 11,125 sqm  
House 2: 11,630 sqm  
total: 22,755 sqm

**9%** TRAINING  
Education and integration projects  
House D: 8,305 sqm

(Fig.31) Planning for development ("EIN ANGEBOT AN BERLIN," 2016)

The large building complex offers ideal structural conditions to create affordable living space in the center of Berlin. The existing office typology is particularly suitable for conversion into communal forms of living with which it is possible to mix different user and target groups. Small, individually used room cells are to be supplemented by generous communal areas.

## **A) Co-use 'inclusive living'**

The large building complex offers ideal structural conditions to create affordable living space in the center of Berlin. The existing office typology is particularly suitable for conversion into communal forms of living with which it is possible to mix different user and target groups. Small, individually used room cells are to be supplemented by generous communal areas.

### **Possible user groups:**

- Culturists, activists and academics  
/ Researchers / doctoral students (with suitable Educational/research project), unlimited, or also in residencies lasting several months
- Students (mixed flat shares)
- Seniors (cross-generational and cross-cultural living and encounters)  
refugee individuals and families / im  
Refugee issue committed citizens
- Social housing for everyone who has such a space need (with corresponding entitlement to housing benefit) and are interested in participating in an integrative housing project.

## **B) Co-use 'integrative work'**

- Studios for Berlin and refugee artists
- Co-working spaces, workshops, community studios
- Co-Learning: Cross-border neighborhood academy (including many academics among the refugees, mutual learning!)
- Project offices of initiatives in a suitable context
- NGO in residence
- Radio broadcasting studio for refugees and local neighborhoods with e.g. "How to live in Berlin" - contributions and other intercultural dialogues to reduce fears on all sides
- Volunteer office, central contact point for voluntary work and civil society commitment, alternative job center
- Central collection point and sorting point for donations for redistribution

## **C) Co-use 'integrative events'**

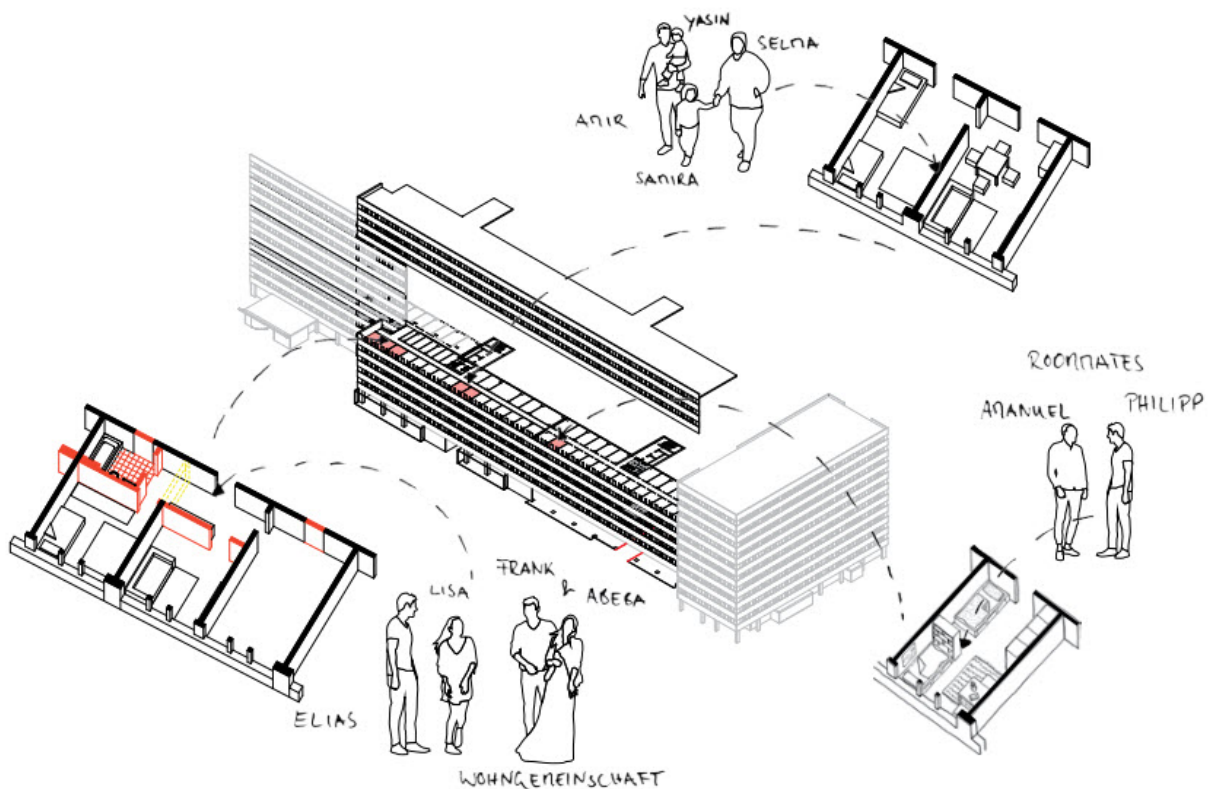
- All users of the building for short-term performative project/presentation/workshop use, exhibitions, etc
- Co-Cooking: open intercultural canteen
- intercultural neighborhood academies
- Artistic project spaces
- Project spaces of initiatives / NGOs in appropriate context
- Resident projects
- Co-Sports: intergenerational formats
- Co-Gardening: roof garden and courtyard

-The large inner courtyard could be programmatically transformed into a public one (Alexandraplatz) with offers explicitly for families, women and children, in a successful mix of users of the house and the neighborhood.

Thanks to its reinforced concrete skeleton construction and the existing safety stairwells, the house offers great flexibility, which easily allows changes of use. The cost of the planned construction measures is estimated to be relatively low.

The technical expansion of the building is to be adapted to the newly planned room situations and to be repaired in large parts or to be completely renewed in parts. For the proposed partial conversion of office use to overnight and residential use, the existing sanitary facilities in the building must be supplemented.

Expansion and conversion can do without a lot of the superfluous: complex floor plan changes, coverings on floors, walls and ceilings as well as cladding on installations, etc. The raw state can be adapted and further developed by the users themselves at a later point in time.



(Fig.32) SKETCH OF RESIDENTIAL TYPOLOGIES FOR HOUSE B & C ("EIN ANGEBOT AN BERLIN," 2016)



Weszkalnys, G. (2007). The Disintegration of a Socialist Exemplar: Discourses on Urban Disorder in Alexanderplatz, Berlin. *Space and Culture*, 10(2), 207–230. <https://doi.org/10.1177/1206331206298552>

Palmier, J. (1989). *Retour*, Berlin (Voyageurs ed.). Payot.

Thiery, David Maximilian (2021): Berlin Allesandersplatz. The model project House of Statistics as an alternative space production in the context of neoliberal urban development policy Strategies for the appropriation and production of spaces, context Alexanderplatz: A product of neoliberal urban development policy. Bachelor thesis, Freie Universität Berlin, Department of Political and Social Sciences

Ziel, Michael; Bachmann, Boris; Hebert, Saskia; Augenstein, Karoline (2022): Real estate projects geared towards the common good as learning spaces for inclusion and local democracy .

Forester, Agnes; Bangratz, Martin; Thissen, Fee (2021): Local Politics and Participation: New Ways of City Making and the Role of Local Politics. Chair for Planning Theory and Urban Development at the Faculty of Architecture RWTH Aachen University (Univ.-Prof. Dr.-Ing. Agnes Förster) on behalf of vhw - Bundesverband für Wohnen und Stadtentwicklung e. V

Willming, Julian (2021): Capitalist Realism or Post-Growth? Evidence from the Mental Growth Infrastructures of Post-Capitalist Organizations, Master's thesis in Environmental Policy, Science and Management presented at Central European University Budapest

Hörner, Christian (2020): Common good as a way of life in Beta. An ethnography of prototypical infrastructures of urban development oriented towards the common good. Thesis at the Humboldt University in Berlin, Faculty of Philosophy, Institute for European Ethnology

Sebastian, M. (2020). Kooperative und gemeinwohlorientierte Stadtentwicklung am Beispiel „Haus der Statistik [Master thesis], an der Humboldt-Universität zu Berlin, Geographisches Institut, Studiengang Urbane Geografien (M. A.).

Weise, Clemens (2018): Between criticism of urban development in Berlin and cooperation with the Senate. An investigation of the "Initiative House of Statistics" and their alternative planning for the center of Berlin. Bachelor thesis submitted in the winter semester 2017/2018 at the Bauhaus University Weimar, Faculty of Architecture and Urban Studies, Urban Studies (B. Sc.)

EIN ANGEBOT AN BERLIN, : SEINE BEWOHNER.INNEN UND POLITISCH VERANTWORTLICHE. (2016, August). In C. Schöningh, *Hausderstatistik*. ZKB ZUSAMMENKUNFT Berlin eG – Genossenschaft für Stadtentwicklung. Retrieved September 21, 2022, from <https://hausderstatistik.org/archiv/>

HdS, A. W. (2022, May 20). Baustart am Haus der Statistik – Zeitplan der BIM – Berliner Immobilien-management GmbH. Modellprojekt Haus Der Statistik. Retrieved September 22, 2022, from <https://hausderstatistik.org/2022/05/20/baustart-am-haus-der-statistik-zeitplan-der-berliner-immobilien-management-gmbh/>

Publikationen. (2021, November 8). Modellprojekt Haus Der Statistik. Retrieved September 22, 2022, from <https://hausderstatistik.org/publikation/>

Koop5. (2022, February 17). Modellprojekt Haus Der Statistik. Retrieved September 24, 2022, from <https://hausderstatistik.org/koop5/>



Alexanderplatz. (n.d.). visitBerlin. Retrieved September 24, 2022, from <https://www.visitberlin.de/en/alexanderplatz>

Berlin's Alexanderplatz: The Complete Guide. (2019, June 26). TripSavvy. Retrieved September 24, 2022, from <https://www.tripsavvy.com/berlin-alexanderplatz-the-complete-guide-4172143>

Leichsenring, J. (n.d.). German Bundestag - The German Democratic Republic (1949 - 1990). German Bundestag. Retrieved September 24, 2022, from <https://www.bundestag.de/en/parliament/history/parliamentarism/gdr/gdr-200348>

Libeskind, D. (1995, October 1). Berlin Alexanderplatz: Ideologies of Design and Planning and the Fate of Public Space. Retrieved September 24, 2022, from <https://quod.lib.umich.edu/j/jii/4750978.0003.101/--berlin-alexanderplatz-ideologies-of-design-and-planning?rgn=main;view=fulltext>

Uhlig, S. (2022, August 29). Baustart im Herzen Berlins: Das Haus der Statistik steht vor Neubeginn. Berliner Abendblatt. Retrieved September 24, 2022, from <https://berliner-abendblatt.de/2022/08/29/baustart-im-herzen-berlins-das-haus-der-statistik-steht-vor-neubeginn/>

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Ch.

Conclusion

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## Conclusion

This thesis aims to propose measures that facilitate the involvement of German authorities in participatory budgeting processes by focusing on the enhancement of the “Haus der Statistik” building. The research encompasses two key dimensions: social and ecological. To address the social dimension, in-depth interviews were conducted with professionals possessing expertise in design and occupying pivotal roles as project stakeholders. Conversely, the ecological dimension entailed a thorough examination of two alternative approaches aimed at quantifying and reducing the CO<sub>2</sub> footprint. Moreover, to achieve a conclusive outcome that effectively balances both social and ecological aspects, public opinions were elicited through AR participating interviews with individuals residing in the vicinity of the building, with a specific emphasis on their perceptions of the ecological design options. The culmination of this research leads to the conclusions and recommendations

The in-depth interviews conducted with professionals revealed a distinct approach employed by German authorities, wherein workshops were utilized to actively solicit and incorporate the ideas and perspectives of the general public, instead of relying solely on the insights provided by architects or urban planners. In contrast, the interviews with the public demonstrated a strong desire for greater clarity and efficacy in their collaborative involvement. It is noteworthy that the typical practice of German authorities involves selling properties, such as the building in question, to generate financial resources, often resulting in the transformation of city centers into predominantly office-oriented neighborhoods. However, considering the unique location, historical significance, and social impact of this particular project, the German authorities are actively striving to achieve a final outcome that aligns with the needs and aspirations of the community, diligently considering all relevant factors throughout the project’s duration. The author discerned a prominent demand from the public to minimize the commercial aspects typically associated with urban projects, reducing the influence of money and commercialism as much as possible. Interestingly, professionals involved in the project perceived the role of monetary considerations and commercial forces as comparatively less influential during the design and construction phases.

Upon conducting calculations and utilizing Tally software, the analysis reveals a noteworthy finding: the utilization of wood as a primary material exhibits favorable outcomes when compared to alternatives such as concrete, glass, and metal. Specifically, the incorporation of wood demonstrates positive effects during the production phase, as well as a subsequent positive impact on reusability, recycling, and energy recovery beyond the system boundary. This finding strongly suggests that employing wood as the primary structural component for the prospective new building, while also exploring its potential applications in other areas, would be a prudent course of action.

Two primary community groups emerged as significant stakeholders during the process of identifying the needs for this project. Firstly, there are individuals who visit Alexanderplatz, often comprising young tourists, shoppers, and casual gatherings seeking short-term engagement. Conversely, the residential community comprises predominantly older residents with long-term needs. To accommodate the diverse requirements of these distinct groups, it becomes imperative to design a flexible spatial solution. In light of this, the author proposes the addition of a multipurpose area in the courtyard, bridging the Haus A, B, C, D, and "Haus der Materialisierung." This space could be made available for rent, providing an adaptable environment that caters to the unique needs of both communities. Moreover, the proposed name for this space, "Haus der Sozialen," reflects its intended purpose and fosters a sense of social interaction.

The author suggests that the function of the proposed building should be derived from its previous use as a stage with shading elements, while emphasizing green activities such as the sale of second-hand and new bicycles, bike repairs, and the hosting of social and cultural events. Any modifications to the function should be based on the demands of the renters, but it is advisable to implement such changes on a short-term basis to assess the impact on the two primary community groups and ensure their acceptance. Therefore, it is recommended that any new functions be temporary and adaptable. In terms of design, a modern, dynamic, and hybrid style is deemed preferable, one that captures the essence of Berlin as a city in constant evolution while reflecting its vibrant identity.

The landscape design of the proposed area demands a strong emphasis on connectivity, facilitating seamless movement between the residential district and Alexanderplatz through the provision of well-designed bike lanes and pedestrian pathways. It is crucial to incorporate specific features to cater to the needs of diverse age groups, such as resting areas for the elderly and open spaces for young individuals seeking social interaction and recreational activities.

Additionally, it is important to acknowledge that the process of implementing the program and exploring alternative options for the initial stages of this project necessitates the involvement of various offices responsible for constructing buildings in Berlin. Achieving participatory budgeting requires sustained engagement through continuous conversations and consultations, utilizing both the project's dedicated website and platform. The programming and design phases will undergo iterative modifications to evolve and ultimately reach the desired outcome during this long-term process.

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appendix

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## Interview Information:

**Name:** -

**Gender:** Man

**Age:** 50-70

**Personal background:** Retired

**Interview Date and Duration:** 25.04.2023

**Interview Setting:** In person

**Interview language:** English

**Location:** Haus der statistik residential neighborhood, Berlin.

Interviewer: So, tell us, what makes Berlin so unique compared to other cities?

Old Man: Well, ya see, Berlin is somethin' special, no doubt about it. This old city has a history that's etched in every brick and stone. I've been livin' here for years, seen it all—the war, the division caused by that damn Berlin Wall. It's these experiences that make Berlin stand out from the rest.

Interviewer: Absolutely, the history of Berlin is truly remarkable. How has that shaped the city?

Old Man: The war, it left scars, deep ones. But let me tell ya, those scars have molded Berliners into resilient folks. We've seen destruction like no other, but we never lost hope. The struggle for unity, that's what defines us. We've witnessed the darkest of times, but we've also seen moments of triumph. And that's what makes us strong.

Interviewer: The Berlin Wall certainly played a significant role. How did its fall impact the city?

Old Man: Ah, that Wall! It was more than just a barrier, you know. It divided families, friends, and dreams. But when it came down in '89, it was like a victory for freedom and unity. Not just for Berlin, but for the whole dang world! The reunification of East and West Berlin brought a fresh sense of hope, a chance for renewal. We wanted a city that symbolizes peace and progress.

Interviewer: Wonderful. Let's start by talking about Alexanderplatz. What about Alexanderplatz might distinguish it from other Berlin neighborhoods, in your opinion?

Old Man: Alexanderplatz is a unique neighborhood with a rich historical background. Its central location makes it easily accessible and a hub for commercial activities. What distinguishes Alexanderplatz is its significance as a cultural and social gathering place. Throughout history, people have converged here for events, protests, and celebrations. This vibrant atmosphere sets it apart from other neighborhoods and makes it a focal point for both locals and visitors.

Interviewer: That's a great point. Now, let's discuss the possibilities and issues you see in the neighborhood around Alexanderplatz.

Old Man: In terms of possibilities, I believe there is a need for more spaces dedicated to the well-being of older residents like myself. Medical facilities such as a clinic or a pharmacy would greatly benefit the neighborhood, providing easy access to healthcare services. As for issues, I feel that the focus on ecological efforts, while important, should not overshadow the need for functional spaces for the elderly. It is crucial to strike a balance between sustainability and inclusivity.

Interviewer: Thank you for sharing your perspective. Moving on to the House of Statistics, which element of the project do you believe might be crucial in terms of socio-ecological issues?

Old Man: In my opinion, incorporating green spaces within the House of Statistics would be crucial in addressing socio-ecological issues. These green areas would not only enhance the aesthetic appeal but also contribute to a healthier environment. Plants and open spaces can improve air quality, provide natural cooling, and create a peaceful atmosphere. It would be a positive step toward integrating nature into our urban spaces and promoting well-being.

Interviewer: That's a great point. Now, considering the involvement of various individuals, how do you think an architect could engage artists, architects, and politicians in the construction of the House of Statistics?

Old Man: To involve artists, architects, and politicians in the construction of the House of Statistics, an architect could organize collaborative workshops or meetings. These sessions could provide a platform for sharing ideas, insights, and expertise. Artists can contribute to the aesthetic aspects of the building, architects can offer technical input, and politicians can provide valuable guidance based on the community's needs and aspirations. Engaging these stakeholders would ensure a comprehensive and inclusive approach to the project.

Interviewer: Thank you for sharing your thoughts. Now, let's talk about your personal engagement with the environment. Have you given any thought to how each person and buildings affect the environment? Do you engage in green activities like biking or participating in green communities?

Old Man: Yes, I believe it is important to consider the impact of our actions on the environment. While I may not engage in biking or participate in green communities myself, I am conscious of energy consumption and waste management in my daily life. I try to minimize my ecological footprint by practicing energy conservation, recycling, and being mindful of resource usage. It is crucial for individuals to be aware of their role in preserving the environment for future generations.

Interviewer: Thank you for sharing your perspective. Lastly, let's discuss the motivation behind wanting to bring the House of Statistics back to life. What do you think drives this desire?



Old Man: I believe the motivation to revive the House of Statistics stems from the recognition of its historical significance and the desire to repurpose it for the community's benefit. It represents a connection to the past and an opportunity to shape the future. By revitalizing the building, it can become a symbol of unity and progress, providing functional spaces that meet the changing needs of the neighborhood and fostering a sense of pride and belonging among its residents.

Interviewer: Thank you for sharing your valuable insights. Now, if you don't mind, I would like to show you a visual representation of two options for the House of Statistics. Please have a look at this AR app on my mobile phone.

[The interviewer shows the AR app to the old man, displaying Option 1 and Option 2.]

Interviewer: Which of these two options do you find more appealing, and why? Which function do you believe is more necessary and currently lacking in House der Statistics?

Old Man: Looking at the options, I find Option 1, with its solar panel and open-air gallery, more appealing. Solar panels contribute to sustainable energy production, and the open-air gallery would provide a communal space for artistic expression and cultural events. Currently, I believe the House of Statistics lacks such spaces for the community to come together, appreciate art, and engage in cultural activities.

Interviewer: Thank you for sharing your preference. Lastly, in your opinion, should the area between buildings be considered as a social space? How do you perceive the significance of green space?

Old Man: Yes, the area between buildings should indeed be thought of as a social space. It can serve as a place for interaction, fostering a sense of community and unity. Green spaces within the neighborhood are of great significance as they contribute to the overall well-being of residents. They provide opportunities for relaxation, physical activity, and connection with nature. Green spaces are essential for a balanced and sustainable urban environment.

Interviewer: Thank you for your thoughtful responses. It has been a pleasure discussing these topics with you today.

Old Man: Thank you for the conversation. I appreciate the opportunity to share my views.

## Interview Information:

**Name:** -

**Gender:** Man

**Age:** 50-70

**Personal background:** work in Army

**Interview Date and Duration:** 25.04.2023

**Interview Setting:** In person

**Interview language:** English

**Location:** Haus der statistik residential neighborhood, Berlin.

Interviewer: Good morning! Thank you for joining me today. I would like to start by asking you a few questions about Berlin and your thoughts on the neighborhood around Alexanderplatz. Are you ready?

Old Man: Good morning. Yes, I'm ready. Fire away!

Interviewer: Excellent. So, in your opinion, what makes Berlin unique compared to other cities?

Old Man: Berlin's uniqueness lies in its rich history, vibrant culture, and the strong sense of community among its residents. The city has witnessed various periods of significant change, and it continues to evolve, embracing diversity and creativity. Berlin's open-mindedness, tolerance, and artistic spirit set it apart from other cities. It is a place where people from all walks of life can find their own niche and express themselves freely.

Interviewer: That's a wonderful perspective. Now, let's shift our focus to the neighborhood around Alexanderplatz. What possibilities and issues do you see there?

Old Man: The neighborhood around Alexanderplatz is a bustling area with immense potential. Its central location makes it easily accessible and a hub for commercial activities. However, one issue that concerns me is the lack of spaces for older residents like myself. It would be great to have designated areas where we can gather with friends, enjoy a walk in the park, or simply observe the younger generation going about their lives. This neighborhood should cater to the needs of all its residents, regardless of age.

Interviewer: That's an important point, indeed. Now, let's talk about the environment. Have you given any thought to how each person and buildings affect the environment? Do you engage in green activities like biking or participating in green communities?

Old Man: Absolutely! I strongly believe that each individual has a responsibility to protect the environment. I try my best to minimize my ecological footprint by participating in green activities. Biking is my preferred mode of transportation whenever possible, as it reduces both traffic congestion and pollution. I am also involved in local green communities that promote sustainable practices and encourage others to make environmentally conscious choices. It's crucial for everyone to understand that our actions today directly impact the well-being of future generations.

Interviewer: Thank you for sharing your commitment to the environment. Now, moving on to the House of Statistics. What do you think the motivation behind wanting to bring it back to life was?

Old Man: The House of Statistics holds historical significance and serves as a symbol of the city's past. I believe the motivation to bring it back to life stems from the desire to preserve this heritage and create a space that serves the community's current needs. By revitalizing the building, it can become a vibrant center that connects people from various backgrounds, fosters collaboration, and addresses pressing societal issues. It's about embracing the past while adapting to the present and future.

Interviewer: Well said. Lastly, the architecture firms are considering various functionalities for the House of Statistics, such as a house for migrants, a greenhouse, a municipality, or galleries. In your opinion, which kind of activities might be more crucial than these new additions?

Old Man: While the suggested ideas are undoubtedly valuable, I believe certain additions could be more crucial for the project. Firstly, an open market would create a vibrant atmosphere, provide local produce, and foster a sense of community. Secondly, an open gallery space would showcase the work of local artists, encouraging creativity and promoting cultural exchange. Lastly, providing open areas for events at night, as well as services for bicycles, would enhance accessibility, promote active transportation, and encourage social interaction. These additions would create a dynamic space that caters to the needs of both residents and visitors.

Interviewer: Thank you for sharing your valuable insights. It has been a pleasure talking with you today.

Old Man: Likewise. Thank you for the conversation.

## **Interview Information:**

**Name:** -

**Gender:** Man and Woman

**Age:** 50-70

**Personal background:** Retired

**Interview Date and Duration:** 25.04.2023

**Interview Setting:** In person

**Interview language:** English

**Location:** Haus der statistik residential neighborhood, Berlin.

Interviewer: Good afternoon, sir and madam. Thank you for taking the time to speak with me today. I'd like to have an informal conversation with you about Berlin and the House of Statistics project. Please feel free to share your thoughts as we discuss.

Old Man: Good afternoon. We're just here for a walk, so let's make it quick.

Old Woman: Yes, we don't have much time, but go ahead.

Interviewer: I understand. Let's begin. First, what do you think makes Berlin unique compared to other cities?

Old Man: Berlin has a rich history and a vibrant culture. Its diversity and openness are what make it stand out. The city has overcome many challenges and transformed into a symbol of resilience and progress.

Old Woman: Berlin is also known for its artistic and creative atmosphere. There's always something happening here, whether it's art exhibitions, music festivals, or cultural events. It's a city that never sleeps.

Interviewer: Thank you for sharing your insights. Now, let's focus on Alexanderplatz. What do you think distinguishes Alexanderplatz from other Berlin neighborhoods?

Old Man: Alexanderplatz is a bustling and central location. It's a major transportation hub and a popular shopping destination. The tall buildings and the TV tower give it a unique skyline that you won't find elsewhere.

Old Woman: Yes, and there are plenty of shopping options here. It's convenient to access, and there's a vibrant energy in the air. But sometimes it feels too commercialized, and we wish there were more useful services around.

Interviewer: That's a valid point. Now, let's talk about the House of Statistics project. Which element of the project do you think is crucial in terms of socio-ecological issues?

Old Man: Honestly, we haven't given it much thought. From what we've observed, the focus seems to be more on the commercial and monetary aspects rather than the social or ecological aspects. It would be great if they considered sustainability and social needs in the design.

Old Woman: Yes, there should be a balance. We've seen some past attempts to involve people's ideas and have workshops, but it didn't seem successful. The project needs to prioritize the community's needs and create spaces that benefit everyone.

Interviewer: Thank you for sharing your perspective. In your opinion, how could an architect involve others in the construction of the House of Statistics, such as artists, architects, and politicians?

Old Man: Architects could organize more inclusive workshops and community meetings where people can express their ideas and concerns. It's important to listen to different voices and incorporate them into the design process.

Old Woman: Yes, involving local artists, architects, and politicians can bring fresh perspectives and ensure that the project truly reflects the community's values and needs. Collaboration and open dialogue are key.

Interviewer: Thank you for your thoughts. Now, I'm curious, have you considered how individuals and buildings affect the environment? Do you engage in any green activities or participate in green communities?

Old Man: We try to be mindful of our impact on the environment. We recycle, conserve energy, and support local initiatives when we can. However, we're not actively involved in green activities or communities.

Old Woman: Yes, we appreciate efforts to protect the environment, but we haven't personally engaged in activities like biking or participating in green communities.

Interviewer: Understood. Now, thinking about the House of Statistics, how do you believe individuals could participate in its events?

Old Man: It would be great to have events that cater to different interests and age groups. The project should create a welcoming environment where individuals can attend exhibitions, workshops, or cultural performances.

Old Woman: Yes, and it should be accessible to everyone. There should be clear communication about events and opportunities for individuals to contribute their ideas or showcase their talents.

Interviewer: Thank you for sharing your insights. Now, what do you think the motivation behind wanting to bring the House of Statistics back to life was?

Old Man: We believe the motivation is to revitalize the area and attract more people, which would ultimately benefit the economy. It's about creating a new symbol for progress and development.

Old Woman: Yes, there's a desire to transform the space and make it more appealing for businesses and visitors. However, it's important to balance commercial interests with the needs and desires of the community.

Interviewer: I appreciate your perspective. Now, regarding the new functionality proposed for the House of Statistics, such as a house for migrants, a greenhouse, a municipality, or galleries, which activities do you think might be more crucial than the ones currently planned?

Old Man: Open market and open gallery could be beneficial as they would attract both locals and tourists. It would be a great way to support local businesses and showcase local artists.

Old Woman: I also think creating open areas for events at night and providing services for bicycles would be valuable. Encouraging outdoor activities and promoting sustainable transportation options would enhance the neighborhood's livability.

Interviewer: Thank you for your input. Now, if you don't mind, I'd like to show you a visual representation of two options for the House of Statistics using an AR app.

[The interviewer shows the AR app on their mobile phone, displaying Option 1 and Option 2.]

Interviewer: Which of these two options do you find more appealing, and why? Which function do you believe is more necessary and currently lacking in the House of Statistics?

Old Man: Option 1, with its solar panels and open-air gallery, seems more appealing. We need sustainable energy solutions, and having a communal space for art and cultural events is something lacking in the current design.

Old Woman: I agree. Option 1 aligns more with our desires for a sustainable and inclusive space. It would be great to see renewable energy sources and a vibrant gathering place for the community.

Interviewer: Thank you for sharing your preference. Lastly, should the area between buildings be thought of as a social space? How do you perceive the significance of green space?

Old Man: Absolutely, the area between buildings should be a social space. It can foster a sense of community and provide opportunities for people to interact and connect. Green spaces are essential for our well-being, offering a peaceful retreat from the urban environment.



Old Woman: Green spaces provide a breath of fresh air and contribute to a healthier and more enjoyable neighborhood. They offer a place to relax, exercise, and enjoy nature. It's important to have well-designed and well-maintained green areas.

Interviewer: Thank you both for sharing your thoughts and insights. I appreciate your time and valuable input.

Old Man: You're welcome. It was nice to share our perspective.

Old Woman: Yes, thank you for listening to us. We hope our opinions will be considered.

## **Interview Information:**

**Name:** -

**Gender:** Woman

**Age:** 50-70

**Personal background:** Retired

**Interview Date and Duration:** 25.04.2023

**Interview Setting:** In person

**Interview language:** English

**Location:** Alexanderplatz commercial zone , Berlin.

Interviewer: Good afternoon. Thank you for taking the time to speak with me. I hope your shopping trip hasn't been too exhausting.

Old Lady: Oh, it's no trouble at all. I'm happy to help. How can I assist you?

Interviewer: I'd like to have an informal conversation with you about Alexanderplatz and the House of Statistics project. Please feel free to share your thoughts as we discuss. Let's begin with Alexanderplatz. What do you think distinguishes it from other Berlin neighborhoods?

Old Lady: Well, Alexanderplatz has always been a central and bustling area of Berlin. It has a rich historical background, especially during the time of the Berlin Wall. It was a significant location for political gatherings and demonstrations. Today, it's known for its vibrant atmosphere, shopping options, and the iconic TV tower.

Interviewer: Thank you for that insight. Now, what possibilities and issues do you see in the neighborhood around Alexanderplatz?

Old Lady: There are plenty of possibilities for further development and improvement in the area. However, one issue I've noticed is that it can sometimes feel too commercialized. While it offers convenient access to shopping, it lacks certain services and amenities that could be more useful for the community.

Interviewer: I appreciate your observation. Now, let's focus on the House of Statistics project. In your opinion, which element of the project might be crucial in terms of socio-ecological issues?

Old Lady: The socio-ecological aspect of the House of Statistics is vital. It should prioritize sustainability and environmental considerations. For example, incorporating renewable energy sources like solar panels can help reduce the building's carbon footprint and contribute to a greener future.

Interviewer: That's an excellent point. Now, how do you believe an architect could involve others in the construction of the House of Statistics, such as artists, architects, and politicians?

Old Lady: Collaboration is key. Architects could organize workshops or invite artists and architects to contribute their ideas and expertise. Additionally, involving politicians in the decision-making process can help ensure that the project reflects the needs and desires of the community.

Interviewer: Thank you for sharing your thoughts. Have you given any thought to how each person and buildings affect the environment? Do you engage in green activities or participate in green communities?

Old Lady: Yes, I believe each person and building has an impact on the environment. While I try my best to be mindful of my actions, such as recycling and conserving energy, I'm not actively engaged in specific green activities or communities.

Interviewer: Thank you for sharing your perspective. Now, how do you think individuals could participate in House of Statistics events?

Old Lady: I believe individuals could participate by attending events organized at the House of Statistics. They could visit exhibitions, attend workshops, or participate in cultural performances. Additionally, the project could offer opportunities for individuals to contribute their own ideas and talents.

Interviewer: That's a great suggestion. Now, what do you think the motivation behind wanting to bring the House of Statistics back to life was?

Old Lady: The motivation is likely to revitalize the area and create a new landmark that attracts both locals and tourists. It could boost the economy and breathe new life into this historical site. However, it's essential to balance commercial interests with the needs and desires of the community.

Interviewer: I completely understand your perspective. Now, the architecture firms are considering various new functionalities for the House of Statistics. Which activities do you believe might be more crucial than the ones currently planned?

Old Lady: In my opinion, activities such as open markets and open galleries would be beneficial. They would support local businesses and provide a platform for local artists to showcase their work. Additionally, creating open areas for events at night and providing services for bicycles would contribute to a livelier and more sustainable neighborhood.

Interviewer: Thank you for sharing your insights. Now, I'd like to show you a visual representation of two options for the House of Statistics using an AR app. Please take a look at my phone.

[The interviewer shows the AR app on their mobile phone, displaying Option 1 and Option 2.]

Interviewer: Which of these two options do you find more appealing, and why? Which function do you believe is more necessary and lacking in the House of Statistics?

Old Lady: Option 1, with its solar panels and open-air gallery, is more appealing to me. It aligns with the need for sustainable energy and provides a space for art and cultural events that is currently lacking.

Interviewer: I appreciate your preference. Lastly, should the area between buildings be thought of as a social space? How do you perceive the significance of green space?

Old Lady: Yes, the area between buildings should definitely be considered a social space. It can serve as a gathering place for people to connect, relax, and enjoy each other's company. Green spaces are vital for our well-being, offering a sense of tranquility and respite from the urban environment.

Interviewer: Thank you so much for sharing your thoughts and experiences. It has been a pleasure speaking with you today.

Old Lady: You're welcome. I'm glad I could contribute. If there's anything else you'd like to know, feel free to ask.

## **Interview Information:**

**Name:** -

**Gender:** Man

**Age:** 20-30

**Personal background:** Student

**Interview Date and Duration:** 25.04.2023

**Interview Setting:** In person

**Interview language:** English

**Location:** Alexanderplatz commercial zone , Berlin.

Interviewer: Hello! Thank you for joining me for this interview. Let's get started!

Young Boy: Sure, I'm excited to participate. Let's go!

Interviewer: Great! So, first question: What makes Berlin unique compared to other cities?

Young Boy: Berlin is known for its vibrant arts and cultural scene, historical significance, and diverse population. The city has a distinct atmosphere that blends its rich history with a modern and creative vibe. This uniqueness sets Berlin apart from many other cities around the world.

Interviewer: Excellent! Now, let's talk about Alexanderplatz. What do you think might distinguish it from other Berlin neighborhoods?

Young Boy: Alexanderplatz stands out due to its central location and bustling energy. It serves as a major transportation hub and commercial center, attracting a large number of people. The iconic TV tower and the variety of shopping options make it a distinct and recognizable neighborhood in Berlin.

Interviewer: Very well put. Now, what possibilities and issues do you see in the neighborhood around Alexanderplatz?

Young Boy: The neighborhood offers great potential for further development and growth. It could become a thriving cultural and social hub. However, there might be challenges with overcrowding and a lack of green spaces. It's important to find a balance between development and preserving the livability of the area.

Interviewer: Indeed. Shifting our focus to the "House of Statistics" project, in your opinion, which element of the project might be crucial in terms of socio-ecological issues?

Young Boy: Considering socio-ecological issues, an element like the shader with PV panels and a gathering space with a bike line could be crucial. These features promote energy efficiency, sustainable transportation, and a sense of community. They align with the project's goals of addressing social and environmental concerns.

Interviewer: That's a thoughtful response. Now, how do you think an architect could involve others in the construction of the House of Statistics, such as artists, architects, and politicians?

Young Boy: Architects could engage artists, architects, and politicians through collaborative workshops and meetings. They could invite them to contribute their expertise, ideas, and perspectives to the project. By fostering a multidisciplinary approach, the architect can ensure that the House of Statistics reflects diverse voices and serves the needs and aspirations of the community.

Interviewer: Well said. Now, have you given any thought to how individuals and buildings affect the environment? Do you engage in green activities or participate in green communities?

Young Boy: To be honest, I haven't given much thought to it before. However, I'm open to learning more about how individuals and buildings impact the environment. I'm willing to explore green activities like biking and participate in green communities to contribute positively to the environment.

Interviewer: That's great to hear. Now, in your opinion, how could individuals participate in House of Statistics events?

Young Boy: Individuals could attend events organized at the House of Statistics, such as exhibitions, workshops, or cultural performances. They could also actively contribute by volunteering their skills or participating in projects related to the building's development. It's about being engaged and actively involved in the cultural and social life of the House of Statistics.

Interviewer: Wonderful. Now, what do you think the motivation behind wanting to bring the House of Statistics back to life was?

Young Boy: I believe the motivation is to revive a historical building and repurpose it for contemporary use. The House of Statistics holds cultural and historical significance, and by bringing it back to life, we honor the past while creating a space that meets the present needs of the community. It's about preserving heritage and revitalizing urban spaces.

Interviewer: Absolutely. Now, the architecture firms are considering giving the House of Statistics new functionality, such as a house for migrants, a greenhouse, a municipality, or galleries. In your opinion, which kind of activities might be more crucial than these new additions?

Young Boy: I believe activities such as creating open market spaces, open galleries, and open areas for events at night would be crucial. These additions provide opportunities for community engagement, cultural exchange, and social interaction. They promote a sense of togetherness and inclusivity within the House of Statistics.



Interviewer: Well thought out. Now, let's talk about the two options for the House of Statistics. The first option has solar panels, an open-air gallery, and green space around it. The second option has shade with PV panels and a gathering space with a bike line. Which of these options do you find more appealing, and why? Which function do you believe is more necessary, and what do you think is currently lacking in the House of Statistics?

Young Boy: Option 2 with the shade, PV panels, and gathering space with a bike line seems more appealing to me. It offers both environmental benefits and a space for community interaction. Currently, the House of Statistics might lack sustainability features and spaces that promote active transportation. Option 2 addresses these needs, making it more necessary and relevant for the project.

Interviewer: That's a valid point. Lastly, should the area between buildings be thought of as a social space? How do you perceive the significance of green space, and whether it should be a covered open space, a semi-covered open space, or an entirely open space?

Young Boy: I believe the area between buildings should be thought of as a social space. It's an opportunity to create a gathering place that fosters community interaction and social connections. As for the significance of green space, it should ideally be an entirely open space, allowing people to enjoy nature and engage in recreational activities. Green spaces enhance the livability and well-being of urban environments.

Interviewer: Fantastic responses! Thank you for sharing your thoughts and insights. This concludes our interview.

Young Boy: Thank you for having me. It was a pleasure to participate!

## **Interview Information:**

**Name:** -

**Gender:** Man

**Age:** 15-20

**Personal background:** Student

**Interview Date and Duration:** 25.04.2023

**Interview Setting:** In person

**Interview language:** English

**Location:** Alexanderplatz commercial zone , Berlin.

Interviewer: The history and spirit of Berlin are truly inspiring. What makes this city unique?

Teen Boy: Oh, dude, Berlin is like the coolest place ever! I'm just a regular teen, going to school and all, but let me tell you why Berlin is special to me.

Interviewer: Absolutely, tell us what makes Berlin unique from your perspective.

Teen Boy: Well, first off, there's always something going on here. The city is buzzing with energy and activities. You've got parks for chilling with friends, skate parks for honing your skills, and sports clubs for playing all kinds of games. It's an active city, and I love that.

Interviewer: That sounds awesome! What else makes Berlin special for you?

Teen Boy: The shopping scene, man! There are so many cool places to hang out and check out the latest fashion trends. From big shopping centers to quirky little boutiques, I can always find something unique. And let's not forget about the food courts. I can grab a tasty snack after a long day of exploring.

Interviewer: That's really cool. Alexanderplatz offers a lot of opportunities for fun and recreation. Are there any issues you see in the neighborhood?

Teen Boy: Well, one thing I notice is that it can get really crowded, especially during peak hours. Sometimes it's hard to find a quiet spot to just hang out and relax. Also, with the increase in commercial centers, it can feel a bit commercialized. It would be awesome to see more green spaces and areas where we can connect with nature.

Interviewer: Those are valid points. It's important to balance the vibrant city life with access to nature. Anything else you'd like to add about the neighborhood?

Teen Boy: Overall, the possibilities in the neighborhood around Alexanderplatz are endless. It's a place where I can have fun, meet people, and explore new things. It's a bit hectic at times, but that's what makes it exciting. With a little more focus on preserving green spaces and creating a balance between commercial areas and recreational spaces, it can become an even better neighborhood for everyone.

Interviewer: Have you given any thought to how each person and buildings affect the environment? Do you engage in green activities like biking or participating in green communities?

Teen Boy: Yeah, man, for sure! I think it's super important to think about how our actions impact the environment. I've learned about climate change and pollution in school, and it's made me more conscious about the choices I make.

As for me, I love biking! It's not only a fun way to get around, but it's also eco-friendly. I try to bike whenever I can, especially for shorter distances. It's a small contribution, but every little bit helps, right? I also participate in some local green communities. We organize clean-up events in parks and raise awareness about environmental issues. It's cool to be part of a group that shares the same values and wants to make a positive impact. Interviewer: What do you think the motivation behind wanting to bring the House of Statics back to life was?

Teen Boy: Dude, I think the motivation behind reviving the House of Statics was all about honoring its badass history and giving it a fresh new start. This place has some serious stories to tell, and bringing it back to life is like bringing back a piece of our city's soul.

You know, there's something cool about preserving the past and showing respect for our cultural roots. The House of Statics has this unique charm and character that you just can't find in modern buildings. It's like stepping into a time capsule and experiencing a different era. I think people wanted to capture that vibe and share it with others.

And let's not forget the neighborhood vibes, man. By bringing back the House of Statics, they're creating a spot for people to come together, hang out, and enjoy some good times. It could become a hotspot for events, parties, or even a chill hangout spot. It's all about creating a sense of community and injecting some energy into the area.

Interviewer: The architecture firms are attempting to give the House of Statistics new functionality, such as a house for migrants, a greenhouse, a municipality, or galleries. Which kind of activities, in your opinion, might be more crucial than this new one that will be added to the project?

Teen Boy: Dude, that's a tough one, but I think there are a few activities that could be super crucial for the House of Statistics. First off, an open market would be awesome! Picture this: stalls filled with fresh produce, local vendors selling cool stuff, and a buzzing atmosphere. It would bring life to the neighborhood and give people a chance to support local businesses.

Next up, an open gallery would be rad! Imagine walking through the House of Statistics and discovering amazing art installations, sculptures, and photography. It would be like a mini art adventure, inspiring creativity and giving artists a platform to showcase their work.

And speaking of creativity, having an open area for events at night would be epic! Imagine concerts, movie screenings, or even open mic nights happening right there. It would be a place where people can gather, have a good time, and enjoy some awesome entertainment.

Oh, and we can't forget about being eco-friendly, bro. Having services for bicycles and promoting sustainable transportation would be crucial. Bike lanes, bike parking, and maybe even bike rentals would encourage people to ditch their cars and pedal around the city. It's all about reducing pollution and staying active.

Last but not least, coworking spaces would be a game-changer. Imagine having a spot where people can come together, work on projects, and collaborate. It would be a hub for innovation and creativity, attracting entrepreneurs, freelancers, and students. Plus, it would create a sense of community and networking opportunities.

So yeah, those are my thoughts, man. An open market, open gallery, open area for events at night, services for bicycles, and coworking spaces would be crucial additions to the House of Statistics project. They would make it a vibrant, sustainable, and creative hub in the heart of the city.

Interviewer: Which of these two options do you find more appealing, and why? Which function is more necessary, and which do you believe is actually lacking in the House of Statistics?

Teen Boy: Dude, I gotta say, both options sound pretty cool, but if I had to choose, I'd go with option one. Here's why: having a shader with PV panels is like killing two birds with one stone. Not only does it provide shade on those scorching summer days, but it also generates clean energy from the sun. It's like being environmentally friendly while chilling out. Plus, having a gathering space with an open gallery is awesome because it creates a vibrant and creative atmosphere. It's a place where people can come together, check out cool art, and maybe even showcase their own creations. It's all about fostering creativity and community vibes, you know?

As for what's more necessary, I think the House of Statistics could really benefit from an open gathering space with a pattern and bike lane, like option two. We need more areas where people can hang out, meet up with friends, and just enjoy the outdoors. And having a designated bike lane is crucial because it encourages sustainable transportation and keeps the city buzzing with bikes. It's a win-win for the environment and our health.

But honestly, I think both options bring something unique to the table. The House of Statistics could use a mix of green spaces, artistic vibes, and sustainable features. It's all about creating a place that's not only functional but also exciting and in tune with the needs of the community.

## **Interview Information:**

**Name:** -

**Gender:** Man

**Age:** 30-40

**Personal background:** worker

**Interview Date and Duration:** 25.04.2023

**Interview Setting:** In person

**Interview language:** Deutsch

**Location:** Alexanderplatz commercial zone , Berlin.

Interviewer: Good day! Thank you for joining me for this interview. Let's get started.

Man: Hello, I'm happy to participate. Let's begin.

Interviewer: Great! To start off, what do you think makes Berlin unique compared to other cities?

Man: Berlin's unique blend of history, culture, and vibrant atmosphere sets it apart. As an Indian, I appreciate the diversity and multiculturalism that Berlin offers. It is also fascinating to compare the architecture of Berlin with that of India, as both have their own distinct styles and influences.

Interviewer: That's an interesting perspective. Now, let's talk about Alexanderplatz. In your opinion, what might distinguish it from other Berlin neighborhoods?

Man: Alexanderplatz stands out due to its central location and bustling energy. It serves as a transportation hub and a commercial center, much like some of the vibrant areas in Indian cities. The presence of the iconic TV tower adds a unique element to the neighborhood, making it easily recognizable.

Interviewer: Well said. Now, what possibilities and issues do you see in the neighborhood around Alexanderplatz?

Man: The neighborhood has great potential for further development and growth. It could become a vibrant cultural and social hub, offering various opportunities for both locals and tourists. However, issues such as overcrowding and a lack of green spaces might need attention. Finding a balance between development and maintaining the neighborhood's livability and sustainability should be a priority.

Interviewer: Indeed, sustainability is crucial. Shifting our focus to the "House of Statistics" project, what do you think might be important in terms of socio-ecological issues?

Man: I must admit that I don't have much information about green building practices, PV panels, or sustainability. However, I believe that incorporating elements that are environmentally friendly and promote social well-being would be beneficial. For example, creating spaces that encourage community interaction and providing facilities for sustainable transportation like biking could be crucial in addressing socio-ecological concerns.



Interviewer: Thank you for your honest response. Now, let's discuss how an architect could involve others in the construction of the House of Statistics, such as artists, architects, and politicians. What are your thoughts on this?

Man: I believe architects could engage others by fostering collaboration through workshops and inclusive forums. By inviting artists, architects, and politicians from diverse backgrounds, the project can benefit from their unique perspectives and expertise. It is essential to ensure that the House of Statistics represents a broad range of voices and meets the needs of different stakeholders.

Interviewer: Well expressed. Now, have you ever considered how individuals and buildings affect the environment? Do you engage in any green activities or participate in green communities?

Man: To be honest, I haven't given much thought to how individuals and buildings impact the environment. However, I am open to learning about it. I believe it's important to promote environmentally friendly activities and sustainable practices. While I haven't actively engaged in green activities like biking or participated in green communities before, I am willing to explore and adopt such practices for a more sustainable future.

Interviewer: That's a positive attitude. In your opinion, how do you think individuals could participate in House of Statistics events?

Man: Individuals could participate in House of Statistics events by attending exhibitions, workshops, or cultural performances held at the venue. They could also contribute by volunteering their skills or participating in community projects associated with the building's development. It's about engaging with the House of Statistics as a vibrant cultural and social space, fostering community involvement and participation.

Interviewer: Wonderful. Now, what do you think the motivation behind wanting to bring the House of Statistics back to life was?

Man: I believe the motivation stems from a desire to preserve historical heritage and repurpose the building for contemporary use. The House of Statistics holds cultural and historical significance, and revitalizing it allows us to honor the past while meeting the present needs of the community. By reviving urban spaces, we can create opportunities for cultural exchange and community engagement.

Interviewer: Absolutely. Now, the architecture firms are considering giving the House of Statistics new functionality. In your opinion, which kind of activities might be more crucial than the new functions being added to the project?

Man: In my opinion, activities that foster community engagement, support local businesses, and promote cultural exchange would be crucial. For example, incorporating open markets, open galleries, and open areas for events at night could create vibrant social spaces. Additionally, providing services for bicycles and utilizing outdoor spaces as meeting places could encourage sustainable transportation and strengthen the sense of community within the House of Statistics.

Interviewer: Insightful. Let's talk about the two options for the House of Statistics. Which option do you find more appealing, and why? Which function do you believe is more necessary, and which do you think is currently lacking in House der Statistics?

Man: Given my limited knowledge on green building practices and sustainability, I don't feel equipped to make an informed decision between the two options. However, I understand that shading can be beneficial in hot climates, and renewable energy generation through PV panels is an important consideration. As for the functions, I believe it would be essential to assess the current needs and shortcomings of the House of Statistics before determining which aspects are more necessary or lacking.

Interviewer: Thank you for sharing your perspective. Lastly, should the area between buildings be thought of as a social space? How do you perceive the significance of green space?

Man: Yes, I believe the area between buildings should be considered as a potential social space. Green spaces have the potential to create opportunities for people to connect with nature, relax, and engage in recreational activities. They contribute to a healthier and more enjoyable urban environment. While I may not have extensive knowledge about the significance of green space, I recognize its potential in enhancing the quality of life for residents and visitors, promoting biodiversity, and improving air quality.

