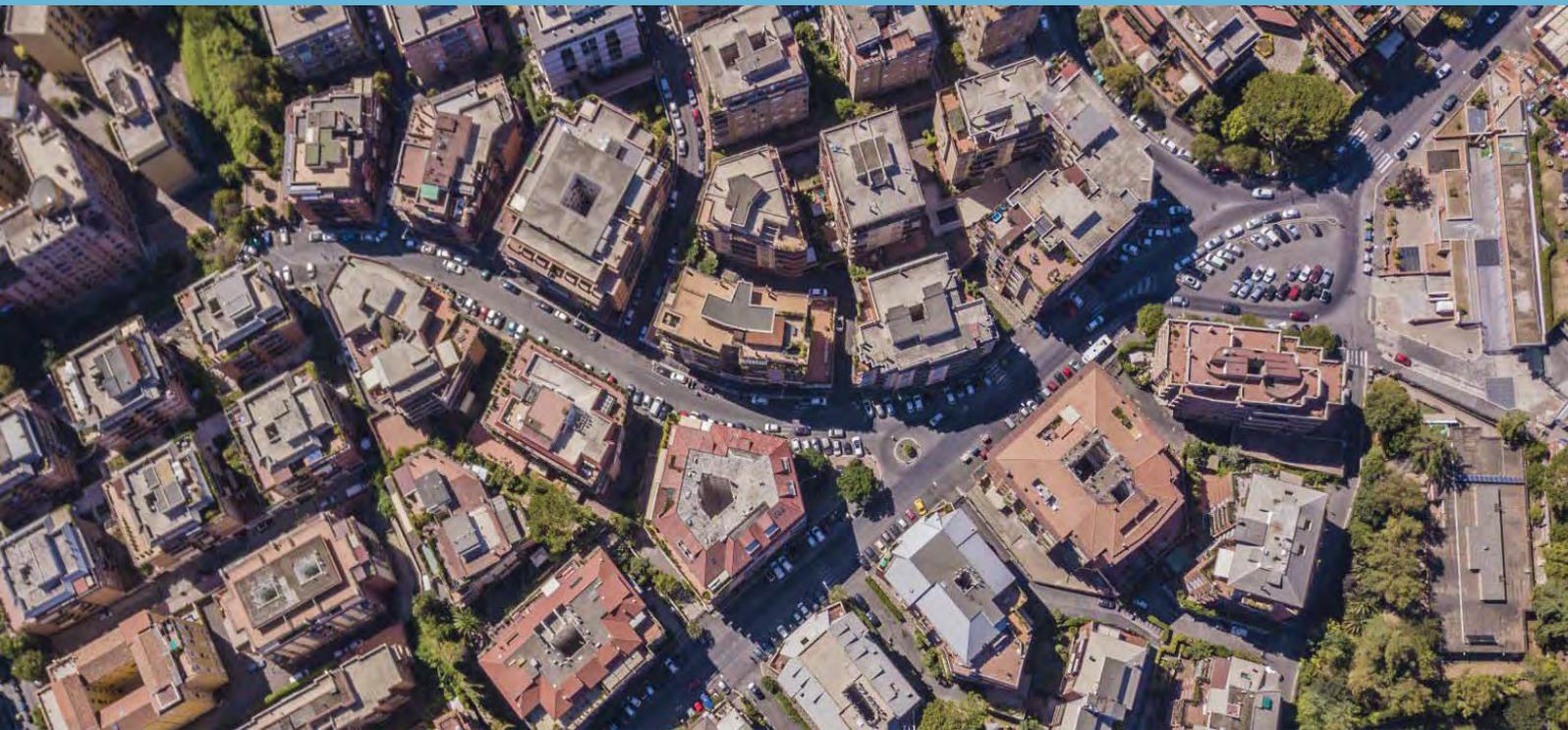


CREATING A EUROPEAN COMPETITION ON TRANSFORMATION OF NEIGHBOURHOODS

Inspired by Living Labs Europe Competition LLEC



SUMMARY AND RESULTS

LLEC WORKSHOP

in Wuppertal during the SDE 21/22, June 2022

Project management agency for the



Federal Ministry
for Economic Affairs
and Climate Action

WHAT IS THE LLEC?

The building sector has a key role in energy transition, because buildings account for a large proportion of energy consumption in every European country. To reduce it, far-reaching transformations of entire cities are necessary. Transformation will be effective if it involves science and stakeholders as well as inhabitants and stimulate their innovative spirit. The Living Labs Europe Competition (LLEC) is to be launched to address this topic.

The LLEC as an EU-wide neighbourhood competition aims to transform cities in a climate-neutral way, to collectively improve climate action in Europe and to increase the renovation rate of buildings. It is addressed to cities and municipalities in the European Union that want to transform a neighbourhood in a sustainable way as a living lab.

Acting as living labs the participating neighbourhoods, in which interdisciplinary teams combining science and industry work together with municipal representatives and residents of the neighbourhoods to develop new ideas, test them and put them into practice.

The competition shall take place regularly at a main hosting district and other participating districts. Juries will evaluate and monitor the transformed districts according to living quality, aesthetics, affordability, inclusion, social compatibility and creativity as well as climate protection goals, sustainability and circular economy.

The LLEC displays different parts of the transformation process via multiple competition disciplines. Architectural contests take place within the early planning phase. Ongoing district transformations are exhibited and accompanied. Transformations that have been realised will be monitored to each other based on defined evaluation criteria. From conceptualisation to construction to evaluation: during the competition, the various phases of transformation are thus discussed, presented and awarded.

The core of the competition are regularly repeated events at which the transformation process is communicated to a broad public in a media-effective manner. The award ceremonies make the extraordinary transformation concepts and realisations widely visible.

Project Management Jülich (PtJ) is working on the competition as an innovative funding approach on behalf of the German Federal Ministry for Economic Affairs and Climate Action (BMWK) in close cooperation with its European partners from the Driving Urban Transition Partnership (DUTP) and the SET Plan.

THE WORKSHOP

Wuppertal, 23rd and 24th of June 2022 during the Solar Decathlon Europe 21/22

Inspired by the Living Labs Europe Competition LLEC concept, the Driving Urban Transitions Partnership (DUTP) is developing new valorisation formats that reach into the neighbourhoods, bring together experts from all sectors and translate research directly into practice. DUTP encourages overarching cooperation with NEB and other initiatives to create a common movement for the European transformation towards climate neutrality. At the workshop, Project Management Jülich (PtJ) presented the LLEC concept to the DUTP and its member states. The competition initiative was discussed in detail during the workshop at the co-working space "Dach der Stadt" (Roof of the City) in Wuppertal, Germany.

The workshop brought together the DUT Partnership, involved member states and the European Commission (JRC), to discuss the status of the creation of a new Europe-wide neighbourhood competition. The participants consulted on boundary conditions regarding the involvement of member states, the European Commission and also problem owners like cities, municipalities and stakeholders and discussed how a competition could optimally be implemented.

The workshop was held in Wuppertal during the final days of the Solar Decathlon Europe 21/22, which also took place in Wuppertal. The participants of the workshop were also invited to experience the thrill and excitement of the SDE by taking part in visits to the venue of SDE and especially to the final award ceremony on Friday, 24th of June.



AGENDA

Day 1: 23rd of June 2022

- (10:30 – 13:00) **Optional: SDE Solar Campus Walk**
- TOP 1 (14:00) Welcome & tour de table (Dr. W. Langen, BMWK/ all)
- TOP 2 (15:00) Introduction and discussion on expected outcomes (M. Kratz, PtJ)
- TOP 3 (15:15) Driving Urban Transition Partnership and LLEC (H.-G. Schwarz, AT-BMK)
Expectations and potential synergies as expected within DUTP
- (15:30 – 16:00) **Coffee Break**
- TOP 4 (16:00) New European Bauhaus and Living Labs Competition (N. Najjar)
Expectations and potential synergies as expected by EC
- TOP 5 (16:30) Driving Urban Transitions – Valorisation Strategy
(H.-G. Schwarz, BMK, S. Jack, PtJ)
Making use of the LLEC
- TOP 6 (17:00) Understanding the LLEC initiative (M. Kratz, PtJ/ all)
Discussion and conclusion of day 1
- (18:00) **End of day 1**
- (20:00 – 22:00) **Evening dinner hosted by BMWK**

Day 2: 24th of June 2022

- TOP 7 (09:00) Outcomes Day 1 and Welcome Day 2 (M. Kratz, PtJ)
- TOP 8 (09:30) Competition in neighbourhoods (Prof. Voss, BUW)
Experience from EBC Annex 74 and SDE
- (10:30 – 11:00) **Coffee Break**
- TOP 9 (11:00) Competition on transformation of neighbourhoods
(Prof. Joppien, Prof. Kuhn, TUD)
Ideas and sketches on format and content
- (12:00 – 13:00) **Lunch**
- TOP 10 (13:00) Organisational structures (M. Kratz, PtJ/ all)
Agreement on DUTP Task 7.2 as intermediary secretariat
Organisational preparations building on existing IEA/EC structures
- TOP 11 (14:00) What is next? (M. Kratz, PtJ/ all)
Engagement on establishment of organisational working group with the objective to set up the first Call for cities to start and promote a European Competition on Urban Transformations
- TOP 12 (14:30) Wrap up
- (15:00) **End of meeting**
- (16:00 – 18:00) **Optional: Final Award Ceremony of SDE 21/22**

INTRODUCTION ON TOPICS AND SPECIFIC OUTCOMES

by Markus Kratz

The workshop is meant to be a forum of discussion and aims at creating a common understanding about the What & How – the content and the form – of a European procedure pursuing nothing less than managing the great transformation, which is necessary in order to avoid severe consequences of climate change for our cities and communities.

In Europe, there are currently numerous initiatives aimed at technologies and methods to achieve climate neutrality. Besides the Driving Urban Transition Partnership (DUTP) – which later will give us a deeper understanding of its Valorisation Strategy – we know Clean Energy Transition Partnership (CETP), Built for People Partnership (B4P), 100 Climate Neutral Cities Mission (100CNC) and the New European Bauhaus (NEB) just to name the most relevant partners for our today's topic.

However, this multitude does not implicate coherence or an overarching frame, which would allow mobilising the impact of all initiatives by focusing on one joint target. Instead – lacking a stronger common context – the initiatives seem to act as competitors in the “grant market”. It is fundamental for success to adjust the procedures according to the following challenge: **HOW can we insist on goals as ambitious as in our programmes (CLIMATE NEUTRALITY IN 2045), if we do not dare to invent adequate formats of acting more cooperatively in our funding practise?** The honest discussion about the HOW of funding mechanisms in Europe is one ambition of our workshop, which will hopefully lead to a joint perception and clear analysis.

Following this analysis and by understanding the approach of the Valorisation Strategy of DUTP we will discuss the potential of competition as a game changing procedure to our dilemma. If climate neutrality is a honestly set goal of our programmes and political statements, we – the representatives responsible in EC and our member states – have to prepare and provide a “fertile ground” in the shape of appropriate procedures for the promoters of change in the European society.

What happened in Europe since the Russian aggression against Ukraine demonstrates that change follows pressure – the war made Europeans join their forces. The pressure of climate change is even more harmful than the attack of an autocratic regime on our democratic values in the European community. Therefore, a procedure is inevitable to mobilize our potentials jointly.

This leads us to the WHAT. At day 2 of our encounter, we will focus on the END-USE-SECTOR as subject of our discussion. By avoiding energy waste and strengthening the coupling potential in European districts and neighbourhoods, energy demand will be reduced to an amount that can be generated and provided locally.

The Triad EFFICIENCY-CONSISTENCY-SUFFICIENCY¹ is central for understanding sustainability. The Technical University of Darmstadt will explain this in form of TRUELAB, their idea for an international competition in building stock. Prof. Voss, OA of IEA-EBC-Annex 74 and responsible for SDE 21/22, will share his insights on procedures and measurements in competitions like SDE.

To be honest, regarding our expectation to get engaged in a creative discussion and a productive process, these are just appetizers. Our goal should be to join forces and means in this process, if you agree. The Collection of opinions and a mutual agreement on the next steps will form the final part of the workshop. Finally, we will visit the SDE-final award ceremony where we practically experience the topics we theoretically worked on in our workshop. This will provide us with great evidence, that the potential of competition is still highly underestimated in our funding strategies.²

Friedrich Schiller

“Man only plays when he is in the fullest sense of the word a human being, and he is only fully a human being when he plays.”

„Der Mensch spielt nur, wo er in voller Bedeutung des Wortes Mensch ist, und er ist nur da ganz Mensch, wo er spielt.“



Markus Kratz

¹ Efficiency: It focuses on a more productive use of matter and energy, i.e. on the productivity of resources.
 Consistency: It focuses on nature-friendly technologies that use the substances and services of ecosystems without destroying them.
 Sufficiency: It focuses on lower resource consumption by reducing the demand for goods.

² https://www-kubi--online-de.translate.google/artikel/spiel-anthropologische-konstante?_x_tr_sl=de&_x_tr_tl=en&_x_tr_hl=de&_x_tr_pto=wapp

SUMMARY AND OUTCOMES OF THE WORKSHOP

Understanding the LLEC

Energy transition is not just about technologies, we also need behavioural change in society and a respective economic structure. We are subjects to a historical change process. The process has not yet been determined or fully established – the way to energy transition is still long. The LLEC gives opportunity to create an inclusive approach, which takes the needs of everyone into account: individuals, cities, policy makers and investors. In this context some cities might be willing to try social innovation approaches as front runners. One aim of the workshop was to exchange ideas about what and how. In this regard, a discussion about the possibilities of a competition came up. There are advantages of a competition format:

- A competition like LLEC is still an unusual format for EC and member states.
- Competition potentially arouses excitement and curiosity. It serves as joint platform for learning.
- However, what would be missing, if collaboration aspects were neglected?
- The aspect of playing to achieve innovation is important, but not necessarily in a competitive setting as one can also win by connecting.
- The risk of losing could be a potential barrier to participate.
- To pick a winner in neighbourhood challenges is a complex challenge.
- It is difficult to develop a contest format for public administrations and the organisational and structural contexts in which they operate. This is especially true if the winning solution should be scalable.

Reframing the Competition Idea

The question is: if there is a loser, who loses? A best practice example is provided by the EURO-PAN-Competition. Here, young professionals are introducing their concepts to different cities. The cities do not lose in this competition.

In addition, the connection of the participants is another important aspect. Therefore, the goal should be that the participants do not act as competitors who play each other off but learn from each other. A more positive connoted interpretation of the term competition is needed.

The LLEC should be a competition influenced by aspects of collaboration.



Dr. Wolfgang Langen, Hans-Günther Schwarz

INSIGHTS AND LEARNINGS FROM OTHER COMPETITION FORMATS

Competition on Transformation of Neighbourhoods: TRUELAB

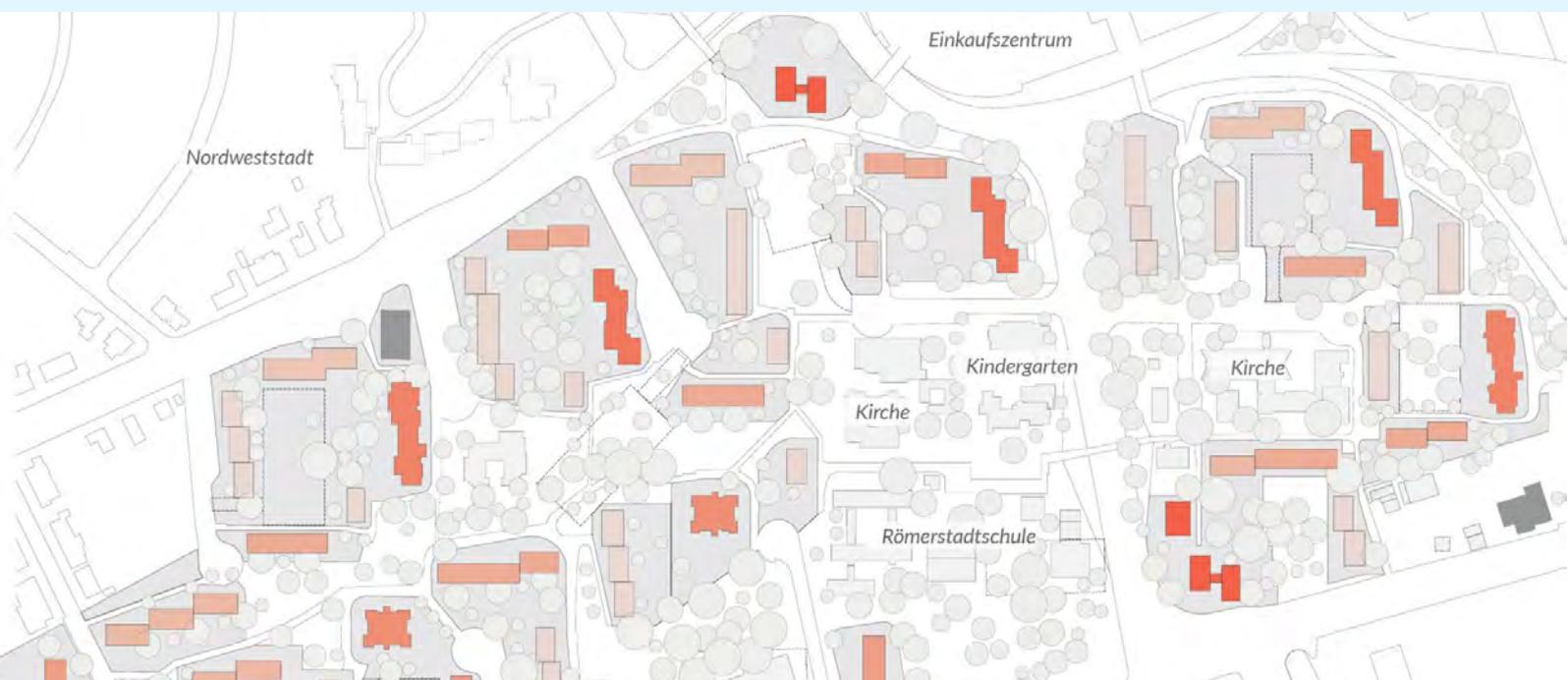
presented by Prof. Anett-Maud Joppien and Prof. Christoph Kuhn

TRUELAB “international competition for transformation of urban energies in living labs” was one competitor at the Ideas Competition “EnEff.Gebäude.2050” 2017.

The aims of TRUELAB are to focus on the development potential of European cities and building stock as well as to create a holistic concept which requires multiple innovative approaches. The goal is to develop a competition format that no longer focuses only on temporary individual buildings, but on innovative transformation processes for existing buildings and neighbourhoods.

The venue for the competition proposal was the city of Frankfurt/Main with 750.000 inhabitants. The specific venue chosen is a residential area of the largest housing company in Frankfurt (ABG FRANKFURT HOLDING GmbH) in a new city district (Nordweststadt) built in the 1960s.

The participating university teams are supposed to present their concepts and goals for the neighbourhoods. During the different phases, feedback of experts and scientists will be given to the teams. A key component of TRUELAB is an operational phase, including an extensive monitoring for 12 months, where the performance of the venues will be systematically recorded and valued in a final documentation and awarding.



Competition for Neighbourhoods – Solar Decathlon Europe goes Urban

presented by Prof. Karsten Voss

According to the principle "Design – Build – Operate", university teams from all over the world came together in June 2022 to compete in the Solar Decathlon Europe (SDE) in Wuppertal, an urban contest for sustainable buildings. In addition to an overall design for a building project, the participants have constructed characteristic building parts in original size on the Solar Campus in Wuppertal. The SDE does not solely focus on the construction of one single building. The projects were rather concerned with the extension of existing buildings in the urban context. By this the participants took into account that buildings always have an environment. That is why they had to align their projects with the needs of the local residents.

Since competitions are expensive, they should not be seen as just a nice event. It is important to ask what the impact is. The most important value in a competition is fairness. So it should be examined to what extent the participants have adapted initial conditions. The assessment of the SDE was a compromise between the impact and the performance of the projects and different energy measurements. In addition, a communication concept should be developed on how to present the competition to the public. This was addressed within the SDE 21/22 by the possibility for visitors to explore the SDE via a digital campus with 3D scans of all houses.

One of the main issues of the connection of research and a competition was that it is not easy to find partners. In addition one should keep in mind that the buildings had to be transported to Germany, which had an impact on the way they are designed.



WHAT IS NEXT?

In Germany, we began the design process of the LLEC. The aim is now to form an approach that is operational, flexible and inclusive.

The discussion shows, that a competition on city level seems not to be the favourite option for DUTP. On the other hand, several aspects of the different competition initiatives are of interest and require further development. The next step is the elaboration of possibilities to incorporate aspects of LLEC into the notions of the Valorisation Strategy of DUTP. The DUTP working group on Valorisation has therefor the objective to establish suitable formats for DUTP and its member states and partners.

*“It is not because things are difficult that we dare not venture.
It is because we dare not venture that they are difficult.”*

Lucius Annaeus Seneca



From left to right: Meli Sylianou (Natural Resources Canada, Ottawa), Prof. Christoph Kuhn (TU Darmstadt), Alexander Schrage (MTE, Paris), Markus Kratz (Pt-Jülich), Annett Kühn (BMWK, Berlin), Hans-Günther Schwarz (BMK, Vienna), Steffen Jack (Pt-Jülich), Anna Heydenreich (Pt-Jülich), Andreas Eckmanns (SFOE, Bern), Dr. Wolfgang Langen (BMWK, Berlin), Tobias Fabian (BMWK, Berlin), Paul Dijkstra (Platform 31, Den Haag), Prof. Anett-Maud Joppien (TU Darmstadt), Prof. Sebastian Fiedler (TH Lübeck), Prof. Karsten Voss (BU Wuppertal)

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THE SOLAR DECATHLON EUROPE IN WUPPERTAL 2022

On the Solar Campus, 18 building models and concepts became reality. As fully functional houses, they formed the centrepiece of the finals of the competition. The teams impressed and inspired more than 115,000 visitors on the Solar Campus. Several participants of the LLEC Workshop were fortunate to visit the solar campus, take guided tours around the building models and experience the thrill and excitement of the final award ceremony on 24th of June.

The winner of the SDE 21/22 competition was team “RoofKIT” from University of Karlsruhe.

