



Energy Local Storage Advanced system

Energy Storage with 2nd Life Batteries

First ELSA stakeholder workshop

Documentation World Café: Discussion about restrictions and opportunities for implementing storage solutions

B.A.U.M. Consult GmbH
Gotzinger Straße 48-50
81371 München
Germany

contact@elsa-h2020.eu
elsa-h2020.eu



The second workshop day of the first ELSA stakeholder workshop focused on the topic of business-cases for small-and medium scale storage solutions. The day was kicked off with an introduction to the topic by Massimo Bertoncini (Engineering). The presentation prepared the workshop participants for the following world café on the topic: restrictions and opportunities for implementing storage solutions. The world café was moderated by Ludwig Karg (B.A.U.M. Consult GmbH).

The participants were invited to discuss the following four questions at four topical tables:

Table 1: What are possible business cases for small-to medium-scale storage solutions?

At the first topical table, the participants discussed potential customers of the ELSA battery storage system and the corresponding business cases. As potential customers of the ELSA battery storage system, the following were e.g. identified: residential home owners, operators of big residential and commercial buildings, production enterprises, aggregators, grid operators, mobility operators and market operators as well as ESCOs, retailers and suppliers.





Figure 1: Final view of the first discussion round at Table 1: What are possible business cases for small-to medium-scale storage solutions?

Table 2: What are national and international regulations that facilitate or hinder business cases?

The participants of the table grouped hindering factors into three categories: policy, regulation and market design. Facilitating factors were additionally grouped into the category price/costs evolution

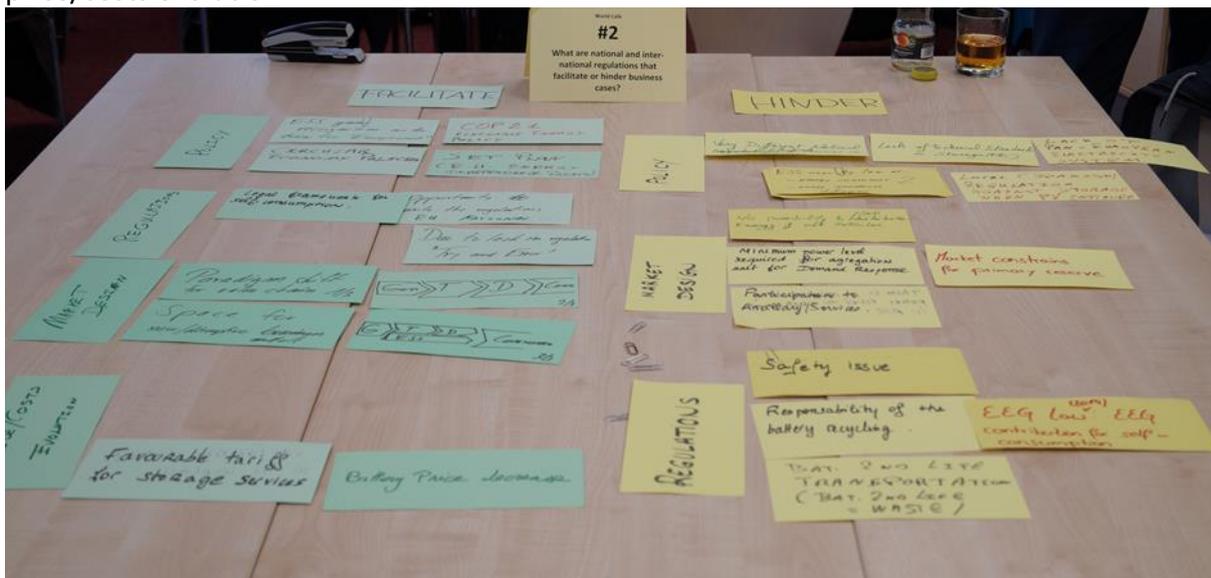


Figure 2: Final view of the first discussion round at Table 2: What are national and international regulations that facilitate or hinder business cases?

Table 3: What are technical developments that could facilitate business cases?

At the third table, four main fields for facilitating technological developments were identified: battery, ICT, district and building.



Figure 3: Final view of Table 3: What are technical developments that could facilitate business cases?

Table 4: What are potential market designs for storage and flexibility solutions?

At the fourth table, the potential market designs for local, regional, national and transnational markets respectively were discussed.

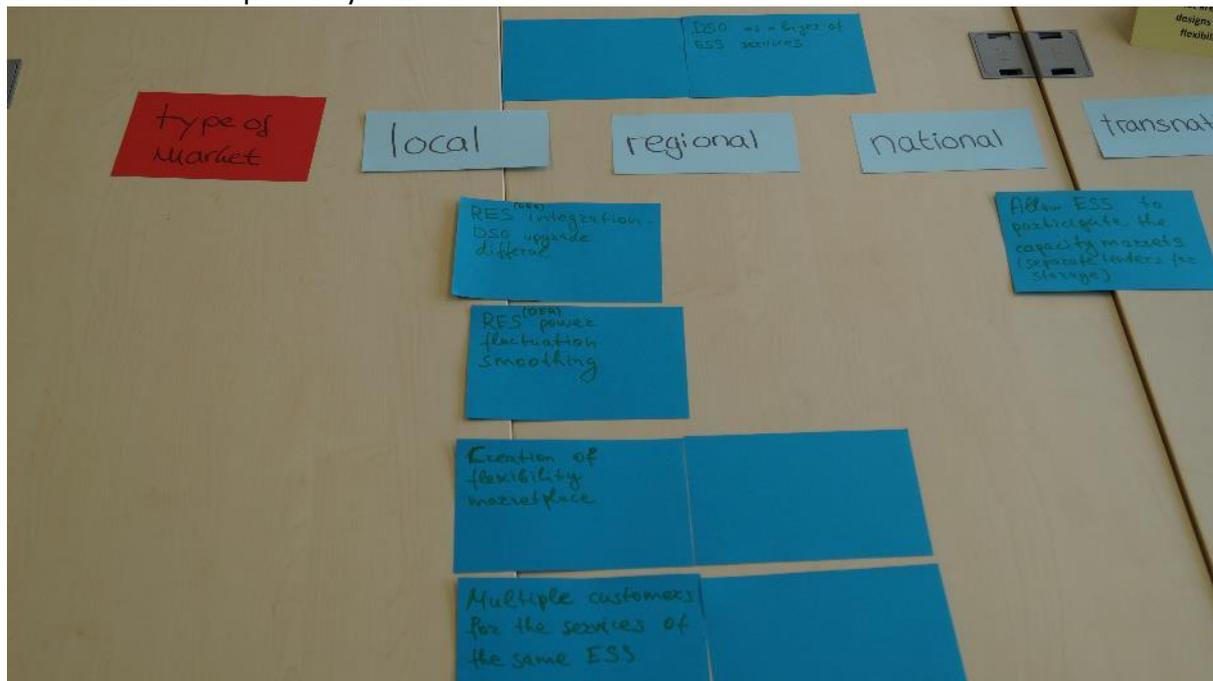


Figure 4: Final view of Table 4: What are potential market designs for storage and flexibility solutions?

After discussing at the topical tables, the participants came together to cluster the facilitating and hindering national and international regulations identified at table 2 with the corresponding business cases from table 1 (see Figure 5 to Figure 7).

In a last step, the potential business cases identified at table 1 were clustered with the potential market designs discussed at table 4 (see Figure 8).



Figure 5: Clustering potential business cases with facilitating and hindering national and international regulations

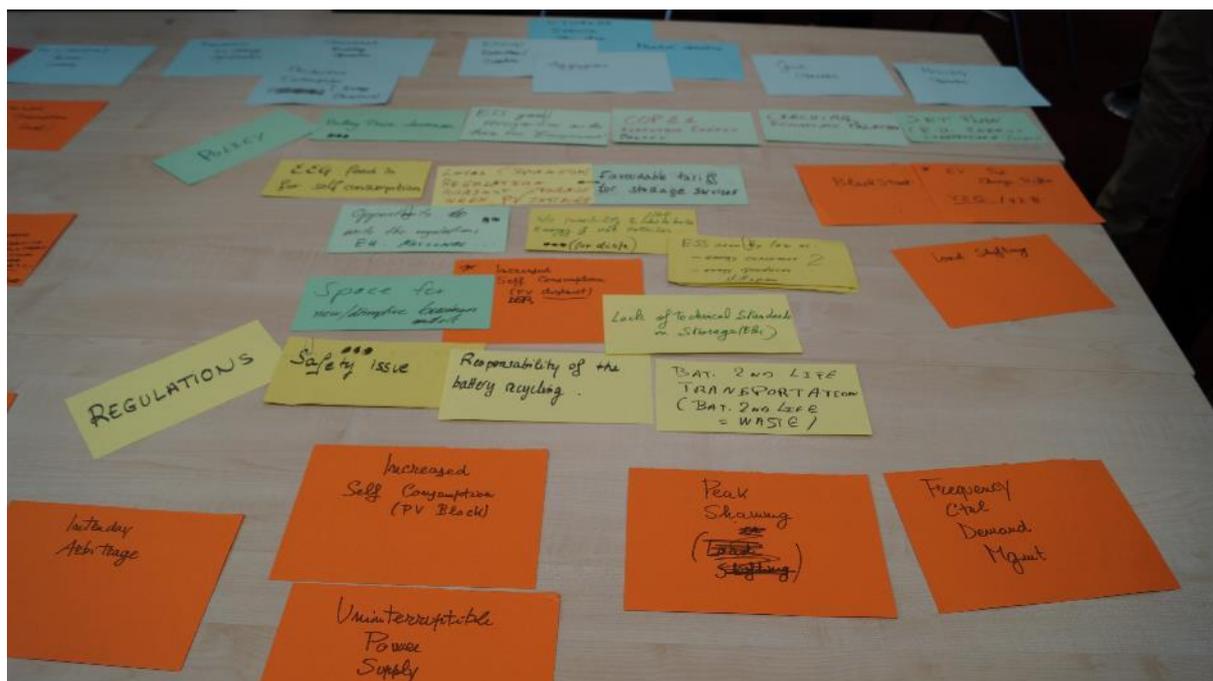


Figure 6: Clustering potential business cases with facilitating and hindering national and international regulations

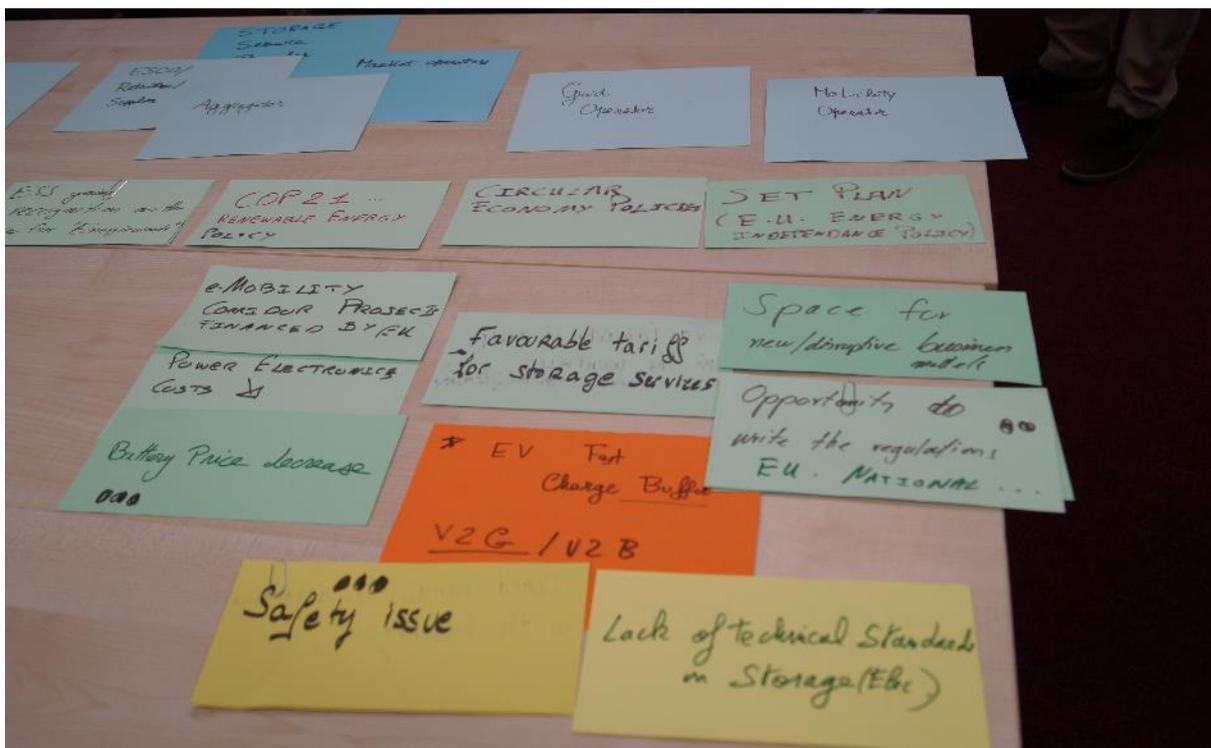


Figure 7: Clustering potential business cases with facilitating and hindering national and international regulations

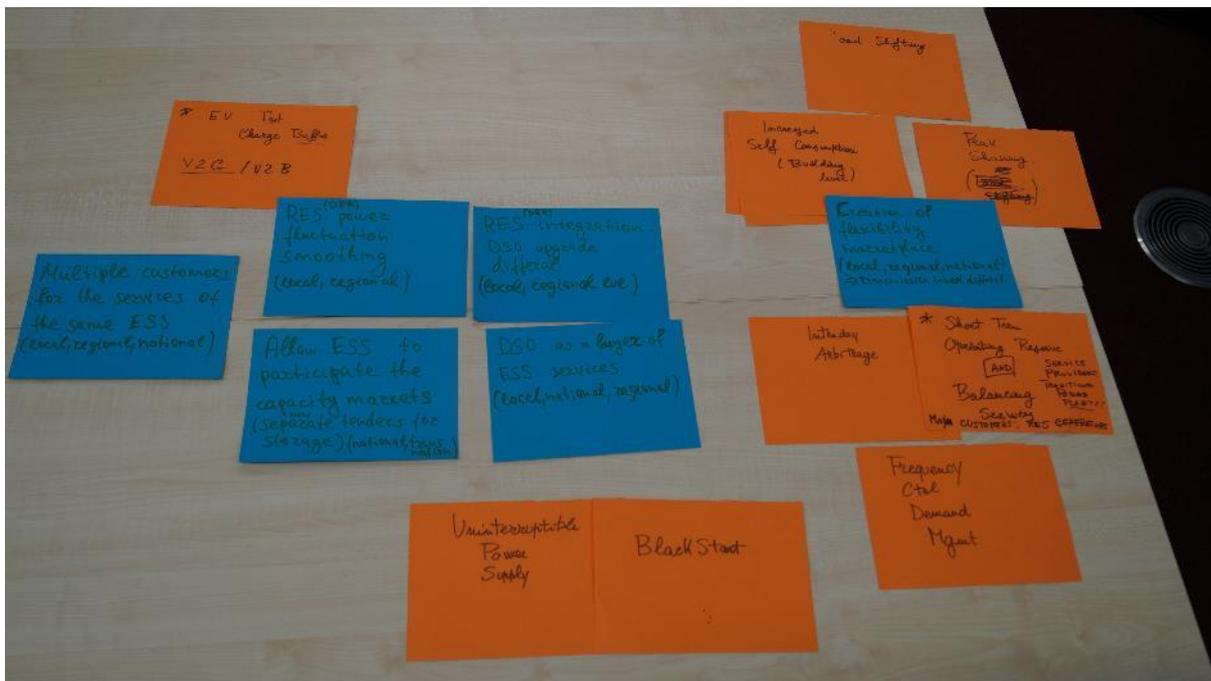


Figure 8: Clustering potential business cases with potential market designs

The workshop closed with a round of feedback from the participants and an invitation to join the upcoming ELSA midterm conference on October 27-28, 2016 in Paris.