

# BISEPS

## Business clusters Integrated Sustainable Energy PackageS

CROSS BORDER TASK FORCE 2

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REPORT



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## Workshop 1 | The development of the BISEPS-tool

### Presentation

During the presentation the updated model concept is presented. At the input side the tool will consist out of two levels: the intake level and the in-depth level. The first level (easy access) will allow to analyse which possible companies could be interesting to cluster. Once the promising clusters are identified, only these companies involved are contacted for the second round of data collection, which will be more in detail. This detailed information is needed to confirm the potential of the identified clusters and to say more about the details (costs and others). To motivate the companies to give this second level information they will be informed about the potential of participating into an identified cluster. Moreover, all companies will receive an output on energy efficiency of their company – to avoid lock-in and to motivate them to continue the process.

### Feedback session: lessons learned

- **Collection of energy consumption data**
  - The data collection will differ in the different countries:
    - The Netherlands: Most SME's have smart meters. You can get the summarized energy consumption data of a specific cluster of companies (you can choose the clusters yourself) from the grid operator.
    - France: It will be complicated to get the data from the grid operator. Before the companies can give the authorization to receive the data directly from the grid operation, the state has to give their authorization first..
    - Belgium: The grid operator is not always needed to get the energy consumption data. SME's can download the data themselves with a software they have from their energy supplier.
  - *Extra challenge:* all operators/suppliers will provide the data in different formats – will we define standards or does it exist already?
  
- **Legislation on exchange of electricity among companies**
  - What is the relevance of collecting electricity data if electricity exchange is forbidden by law?
  - Given this legal constraint, it is probably more promising to focus on the exchange of thermal energy. This however depends on the heating source. For instance, you cannot exchange natural gas, but you can exchange space heating. Collecting gas consumption data is thus not relevant.
  - Thermal energy data are however even harder to obtain. Moreover, the total thermal energy use of a company is often not even interesting. If you want the data to be relevant, you will need multiple metering points in some companies.
  - Basic heating is too small in the total energy use of a company. Therefore, you need to integrate process heating into the model.

- Firstly, the energy intensive processes and their temperatures will need to be identified.
  - You can obtain much of this information from the companies themselves (Do you have waste heat? For what do you use gas/steam/hot water/cold water?).
  - Only at the second level of the model you will need more detailed information (temperatures, etc.).
  - Existing heatmaps can be used for big companies.
  - Heatnets should be taken into account.
- **How to involve and motivate SME's?**
- Not only the access to energy consumption data will be challenging. The SME's will be hard to motivate to share their data, because of lack of confidentiality issues. Their trust will have to be gained. Maybe by making a BISEPS confidentiality form?
  - For companies this is often a bigger concern than the cost of energy investments.
  - Tools will need to be developed to assist the park manager in convincing the SME's.
  - How this trust issue will be handled should be part of the BISEPS guidelines.
  - A personal visit to the companies will be a must. Go slow, but efficient. Avoid that companies see it as a too conceptual tool. If you look into the needs and company structure the companies will react more positive. They must understand how result the tool allows them to reduce their costs immediately.
  - The results of the tool must be easy to understand for business park managers, so that they can explain it easily to the companies.
  - A platform for business park managers to exchange information and experience could be useful.
- **Model dimension**
- The model should not be overly ambitious – being self-supportive should not be the ambition.
  - It could however be interesting to allow over-production in the model, and to take into account grid injection.
- **Model dynamics**
- Energy is a very fast moving world. The model will need to be dynamic to make it useful.

## Workshop 2 | The BISEPS roll out in the living labs

### Presentation

The action plan for the living labs is presented. In the different living labs different approaches will be tested (active, passive, open). The involvement of companies is a long process.

### Feedback session: lessons learned

#### ▪ Involvement of SME's

- Use the business park association topics (safety, green, etc.) to get the SME's interested in BISEPS.
- The demand side is overwhelmed by the supply side. The demand side should be helped (unburdened) to find the best supplier. Therefore the supply side should be helped to be organised better, by for instance creating a working agreement with the suppliers.
- A good knowledge of the supply side (best businesses, best technologies, best prices) is therefore crucial.
- If the demand side would be centralised, they would be able to get more benefits. They could be organised in a joint venture.
- The coordination between both demand and supply side is the responsibility of the living lab managers.
- The process of involving SME's should move fast, if not, you will lose the SME's.
- Early adaptors should be used to convince other SME's.
- Development agencies could play a role by financing the most risky part of the investment. The bank can then cover the rest of the projects with lower rents.

#### ▪ Involvement of citizens

- Citizens should be able to be involved through investment (crowd-funding).

#### ▪ Reports on the quadruple helix

- <http://www.leydesdorff.net/ntuple/>
- <http://docplayer.nl/1189900-De-quadruple-helix-de-triple-helix-voorbij.html>
- <https://ec.europa.eu/digital-single-market/en/open-innovation-20>
- <https://issuu.com/enoll/docs/enoll-print>
- <https://ec.europa.eu/digital-single-market/en/search/site/living%2520lab>