

# **Meet the Buyer event**

20 November 2019

Paleis 10, Avenue de Miramar 11, 1020 Brussels (Belgium)



## CO2 neutral multi energy grid in Green Energy Park in Zellik

Green Energy Park (GEP) is a centre of expertise in sustainable energy systems, mobility, smart regions and healthcare technology. An on-site green datacentre offers sufficient capacity to support calculations by research institutes and companies.

On the GEP site, a multi-energy grid will be build, consisting of a low temperature thermal grid and an electric grid. The thermal grid, using recovered heat from the data centre, will heat the buildings on the site, as well as a residential area nearby.

Meet the Buyer events offer **interesting opportunities for your company** to get in touch with the leading enterprises in a variety of business sectors. The event is **invite only** and will give you the chance to have an individual **one-to-one meeting** with **key decision makers**. Join the event, establish valuable collaborations, pitch your products and services, and discuss business partnerships that can fast-forward your company's growth.

Event time schedule (preliminary)	
09:00 – 12:00	General intro + Individual meetings part 1
12:00 – 13:00	Lunch + networking market
13:00 – 16:00	Individual meetings part 2
16:00 – 18:00	GSTIC plenary session: Living the change*
18:00 – 21:00	GSTIC welcome reception & networking*





# **Buyer profile**

### What is their business?

Green Energy Park is the result of the collaboration between the Vrije Universiteit Brussel (VUB - Free University of Brussels), the Universitair Ziekenhuis Brussel (UZ Brussel - University Hospital of Brussels), the Energy Cluster Flux50, the municipality of Asse, the Flemish Government and several companies. The park is a centre of expertise in sustainable energy systems, mobility, smart regions and healthcare technology. It offers facilities for research, development, pilot studies, showcases, education and trainings. An on-site green datacentre offers sufficient capacity to support calculations by research institutes and companies. Green Energy Park aims to stimulate strategic partnerships to develop solutions for the future. One of their research domains is sustainable energy and mobility. The park will be equipped with a low-temperature thermal grid and a large electric grid. All buildings in the park can partake in the "CO<sub>2</sub> neutral smart multi energy grid" by supplying and utilising energy. Excess heat from the datacentre, heatpumps, cogenerations and different renewable energy sources will be added to the grid. Energy will be stored in multiple batteries, electrical cars, heat buffers and underground storage. Due to the park's location nearby a residential area, the thermal part of the grid will be extended to the residential development, in collaboration with Matexi.

The development of a next generation  $CO_2$  neutral thermal grid is an important solution to realize the energy transition towards a carbon neutral society. For this, the creation of a techno-economic blueprint is desired to establish the potential of the grid in terms of set-up, communication, cybersecurity, business model, legal framework,...

### The multi energy grid in depth

The multi energy grid will consist of a (mainly) low temperature thermal grid and an electric grid. On the business park of Green Energy Park solar and wind energy are generated and will be injected in the electric grid. All companies located at the park are connected and can inject to or consume from the electrical and the thermal grid.

The thermal grid will be extended form the business park to the adjacent existing business area and to the nearby new built residential area. Also here, users can inject or consume heat. This creates a bidirectional interaction between the business park and the residential area.



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### What are they looking for?

Techno-economic blueprint for a CO<sub>2</sub> neutral multi energy grid in Green Energy Park (GEP) in Zellik, its adjoining business park and nearby residential area

- Technical set-up of the thermal grid
  - o Infrastructure for thermal grids
  - o Heat recovery solutions in the datacentre
  - o Bi-directional interaction with different end-users (professional and residential)
  - o Bi-directional heat pumps (user as suppliers and purchaser), fuel cells, booster pumps
  - Heat storage solutions
- Technical set-up of the park's electric grid
  - o Bi-directional interaction between GEP's electric grid and the national electric grid
  - ICT solutions for connection between electric and thermal grid
- Economical set-up of the CO<sub>2</sub> neutral grid to develop well-balanced tariff structures with respect to the different stakeholders\*, considering the bi-directional interaction with different end-users and the national electrical grid
- Communication protocols
  - Managing and steering of the grid
  - Development of self-learning algorithms
  - Cybersecurity solutions
- Set up of a legal and regulatory framework:
  - Currently, the regulation of heat production and exchange is limited. A well-balanced framework describing the responsibilities of different stakeholders\*, will promote the development of thermal grids

\*Possible stakeholders: professional and residential end-users, municipalities, provinces, suppliers, construction promotors, grid operators ...

#### How can you apply?

If you are interested in this opportunity, please contact **Stefanie De Smet** by sending an email to stefaniedesmet@cleantechflanders.com and briefly indicate the interest of your company in the Buyer's case. You can also contact your regional SCALE-UP partner.



# **Meet the Buyer event during GSTIC**

Registration will be up until and including the 25<sup>th</sup> of October

Suppliers will be informed on their selection on the **6<sup>th</sup> of November** at the latest. Selected suppliers will partake in one-to-one meetings with key decision makers from the Living Lab Green Energy Park and its partners. On top of that suppliers will have the opportunity to pitch their solution on stage for all attendees.

The living lab event will be organized during <u>G-STIC</u> 2019, the Global Sustainable Technology & Innovation Conference at Brussels Expo. Four years after the launch of Agenda 2030 and its associated Sustainable Development Goals (SDGs) by the United Nations, there is a consensus among experts that progress is lacking. This is a clear sign. Achieving the SDGs with business-as-usual is just not possible. G-STIC aims to accelerate the transition to a wide-scale deployment of market-ready integrated technological solutions that can have a big impact on the achievement of the SDGs. Bearing this goal in mind, technological clusters that contribute to 6 societal challenges will be identified. These 6 challenges are: safe climate for all, education for all, energy for all, health for all, sustainable ocean resources and water for all. In addition, also 5 cross-cutting themes of crucial importance to the societal challenges will be addressed: circular economy, geospatial data, ICT as enabling technology, gender mainstreaming and youth engagement. This identification process will result in a living library of breakthrough transformative technologies across sectors, illustrated with best practices and inspiring examples. Captains of industry can use this library for exploring new business opportunities.

Suppliers present at the living lab have the opportunity to partake for free in the late afternoon plenary session Living the Change and the networking reception of G-STIC on the 20<sup>th</sup> of November in the evening. An ideal opportunity to connect with an international audience (> 1000 people) coming from all over the world and involved in achieving SDGs on a daily basis.



#### **SCALE-UP PARTNERS**

This Meet the Buyer event is an exclusive invitation for companies associated with the partner organisations in the North Sea region. Cleantech member organisations have joined forces in the Interreg SCALE-UP project to enable cross-border business contacts between SMEs with green solutions and established large companies. The overall aim is to facilitate for innovative cleantech companies to scale up your start-up. Consultants at the member organisations help participants prepare the meetings and support them through the business process.

#### **CONTACT**

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Renewable Energy Network Agency