



Karelia

Sirkkala Energy Park – In the heart of
bioeconomy development and learning

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Development, training and education

KUAS has a broad international network and agreements for versatile and long-term cooperation in education, R&D and mobility with 28 organisations.

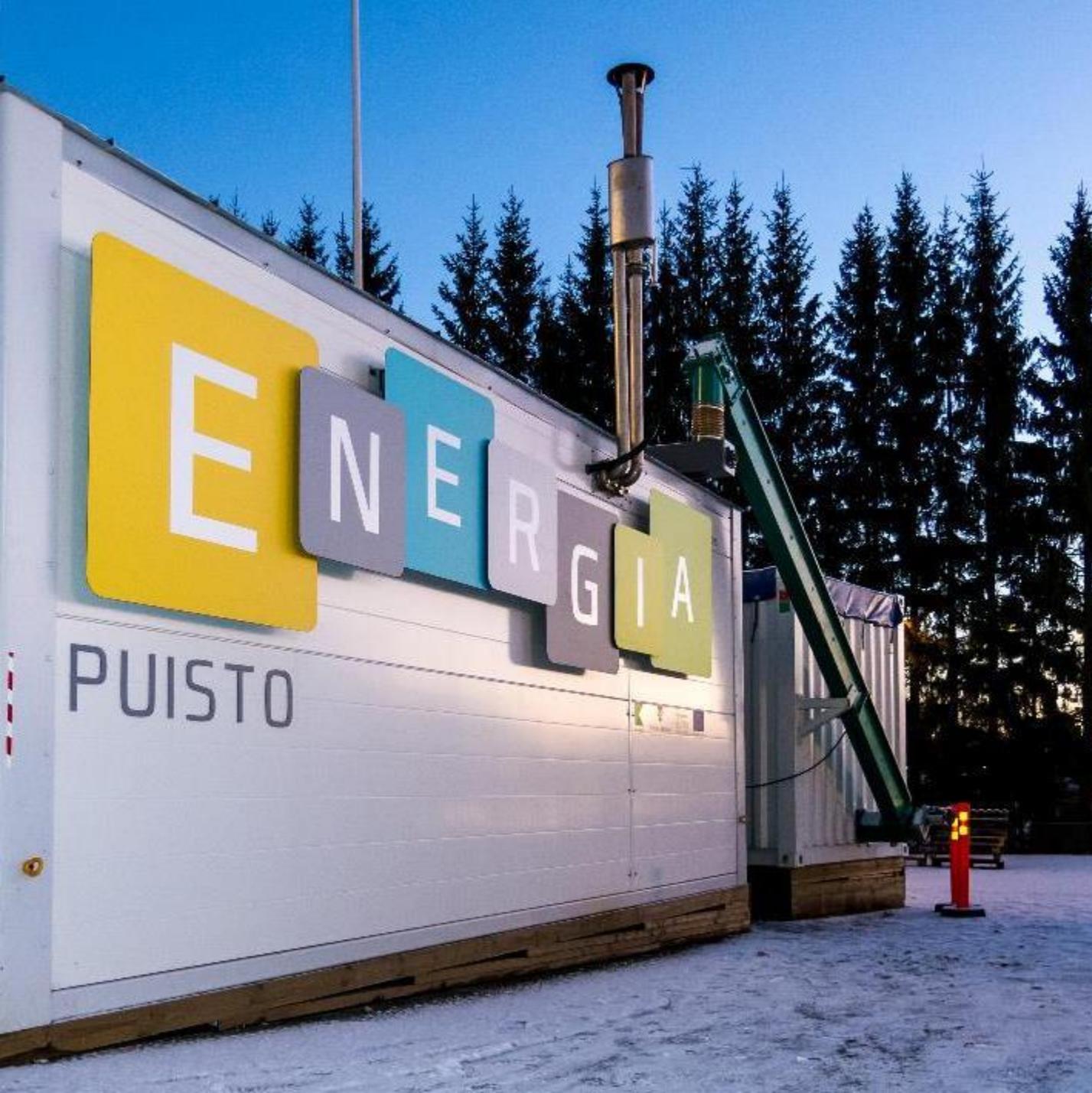
KUAS develops and offers R&D services of high quality.

Over the last 20 years it has gained strong experience acting in the role of lead partner or partner organization in both national and international projects.

Focuses on:

- Wood-based energy production
- Sustainable energy and materials
- Bio-economy based sustainable energy solutions
- Wood construction
- Use of wood-based materials
- Public-private partnerships
- Entrepreneurship.





Sirkkala Energy Park

Real-life R&D environment.

Located near the campus area and offers an easily-accessible learning and benchmarking environment for students and visitors.

Sirkkala Energy Park provides a large set of technical solutions for testing and development.

CHP production (Combined Heat and Power)

Small scale with *wood chips*:

- Volter 40- CHP
- 100kW heat, 40kW power
- More information: <https://volter.fi/>

“Nano” scale with *wood pellets*:

- Ökofen Pellematic Condens_e
- 9kW heat, 0,6kW power
- More information: http://www.okofen-e.com/en/oekoFEN_e/





Training burner and solid fuel boiler

Hylic Flame, local manufacturer;
<http://www.pappinen.fi/>

Used with different types of pellets.

Open control system, for educative purposes; “What happens, if we...”



Pellet production trials and testing

Unique press for small scale testing; over 10 years of experience from different materials and additives.

Quality testing equipment, according the standard.





Solar energy in Sirkkala

Variety of solar collectors for hot water production, five different types.

Solar panels for power production;
- 4,16kW + 2,6kW + 2,1kW panels





Other devices:

- Mobile electricity storage, 30kW
- Mobile wood fuel dryer
- Pellet stove, grid free- equipped
- Flue gas and small particle analyzers
- Bomb calorimeter
- And many other handy equipment 😊





More information and contact details

www.karelia.fi/energy

