How to become Prosumer

Jānis Ikaunieks

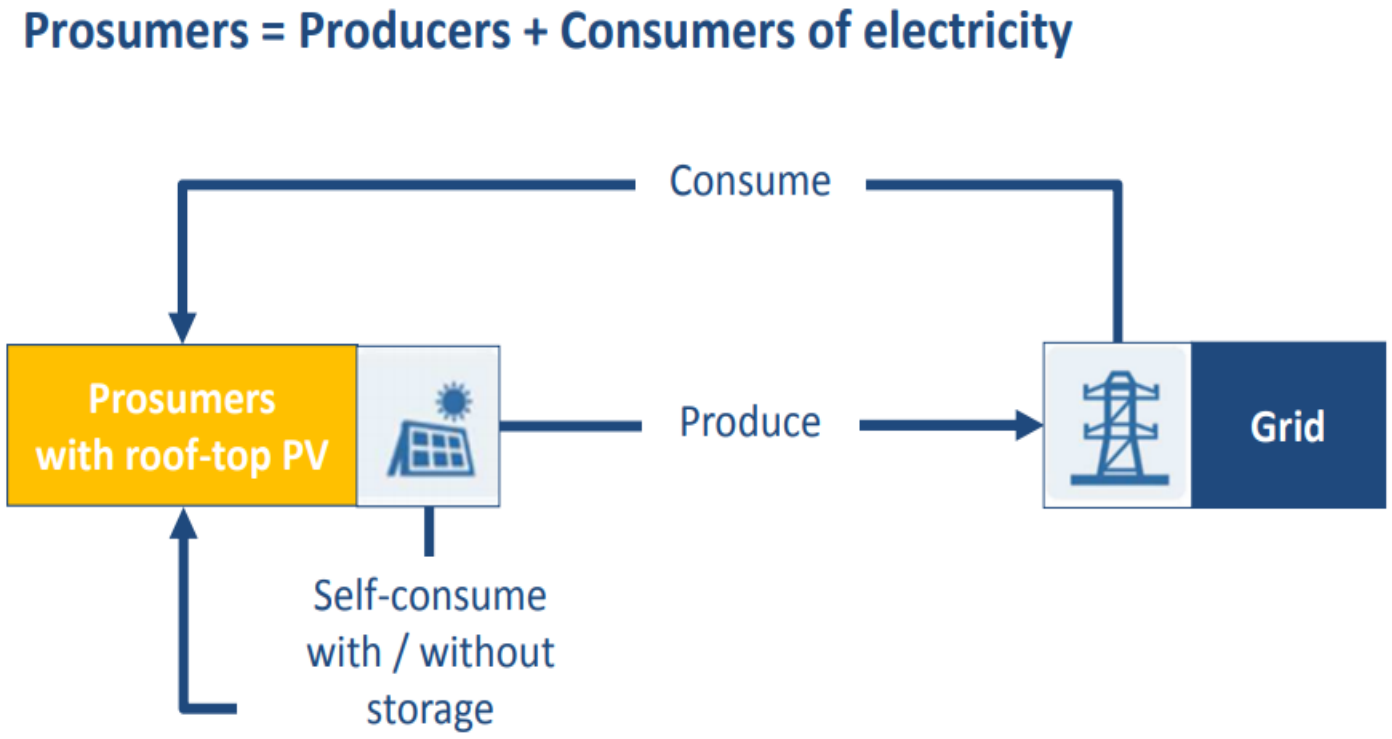
Agris Kamenders

Vidzeme planning region

08.12.2020.

Prosumerism

Prosumer



Prosumer:
*electricity consumer producing electricity to support his/her own consumption and possibly for injection into the grid.**

*G. Masson (IEA PVPS), J. I. Briano and M. J. Baez (CREARA)

Toolbox

Guide for Prosumerism

- Guideline for Solar Energy (strategic) Planning
- Guideline for Step-by-Step to Become a Prosumerist
- Guideline for Procurement of Solar Energy
- EFFECT4buildings prosumer tool
- Prosumerism Training Material
- Good practice
- Mapping of Potential Solar Panel Ground Areas. Guide
- Video Presentation

Guideline for Solar Energy (strategic) Planning

- It gives insight in EU and each participating countries legislation framework regarding prosumerism
  - support schemes
  - tools
  - guidelines
- PV market trends and costs
- Global and each countries installed capacity trends
- Price trends for modules and installation
- PV technology and its efficiency trends

Guideline for Step-by-Step to Become a Prosumerist

- Planning of the installation
- Harmonizing the PV installation project with local authorities and DNO
  - Submit an application to DNO
  - Sign the contract with the DNO
- Installation of PV system
  - Install and prepare the plant for operation
  - Fill in the annexes of the contract
  - The DNO will connect the microgenerator to the grid
- Testing, commissioning and operation

Guideline for Procurement of Solar Energy

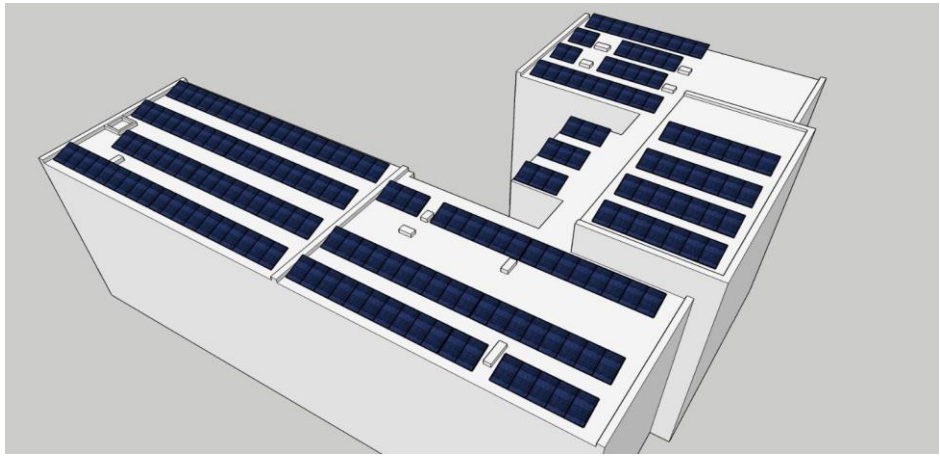
Procurement should include at least main requirements:

- Purpose
- Excisting conditions
- Regulations
- Power Quality (PQ)
- Equipment for electricity production
- Marking, testing and documentation
- After final inspection

EFFECT4buildings prosumer calculation tool

What can you achieve by using this tool?

1. To determine the optimal size of the PV system
2. To find out how much electricity can be produced from a selected area
3. To make financial calculations to identify savings, income, necessary investments, repayment time and the overall profitability of the system
4. To find out how a storage system would improve PV systems efficiency



EFFECT4buildings

Results on yearly basis

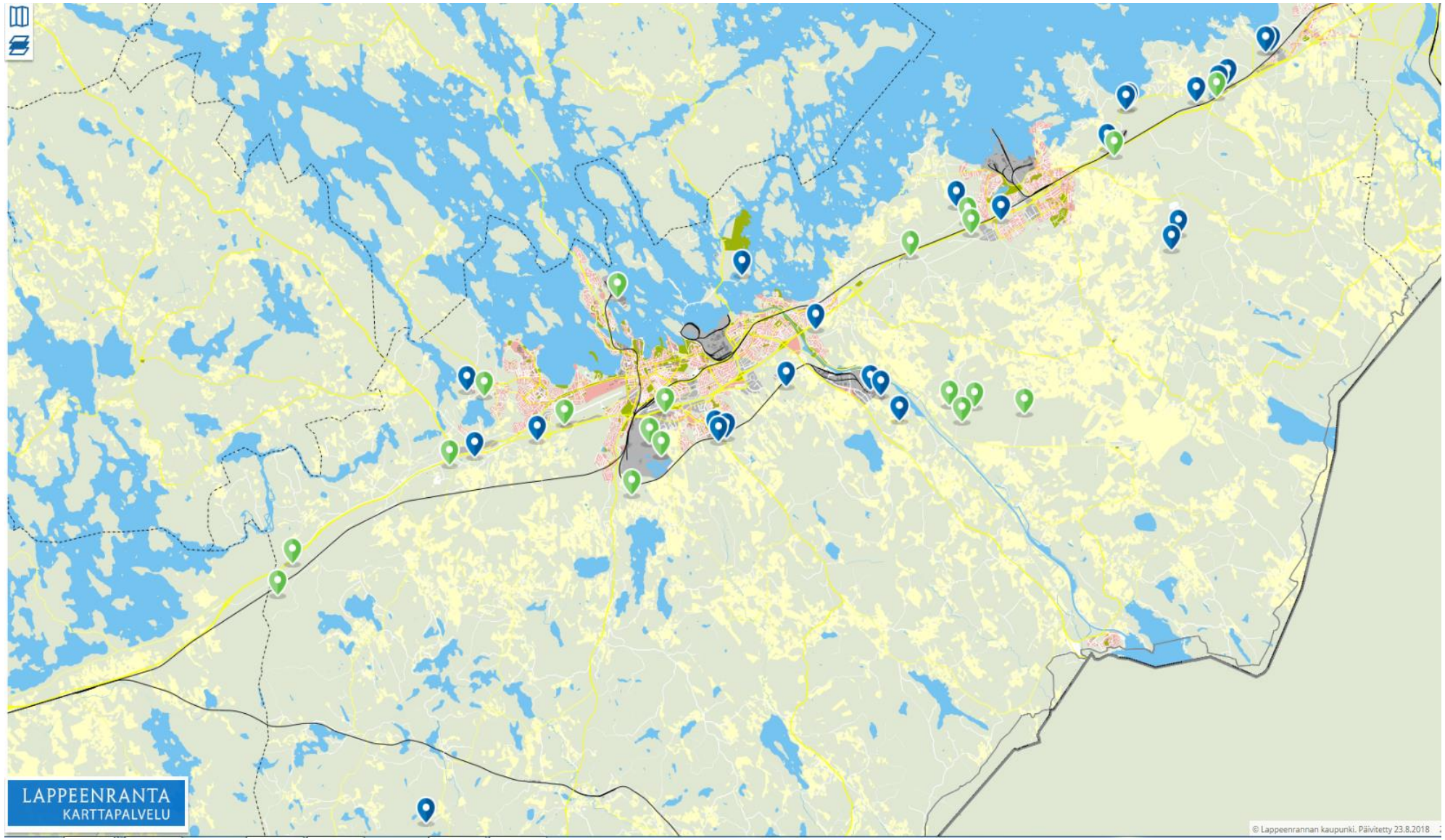
results	value	unit
solar electricity production	47 370,82	kWh
electrical demand/need	142 000,00	kWh
direct own consumption without storage	38 517,20	kWh
own production quota without storage	81,31%	%
degree of self-sufficiency without storage	27,12%	%
used electricity for charging the system	N/A	kWh
own consumption with storage	N/A	kWh
own production quota with storage	N/A	%
degree of self-sufficiency with storage	N/A	%
storage losses	N/A	kWh
share of production in storage losses	N/A	%
over production	8 853,62	kWh
remaining power outlet	103 482,80	kWh

Cases in the project

- Legal barriers in relation to producing and selling energy across municipalities
- Mapping of potential solar panel ground areas
- Develop an excel tool for calculating the profitability
- Approbation of EFFECT4buildings calculation tool
- Guide for procurement of photovoltaics systems
- Measurement and verification (M&V) plan for purchasing PV panels.
- Series of trainings and workshops

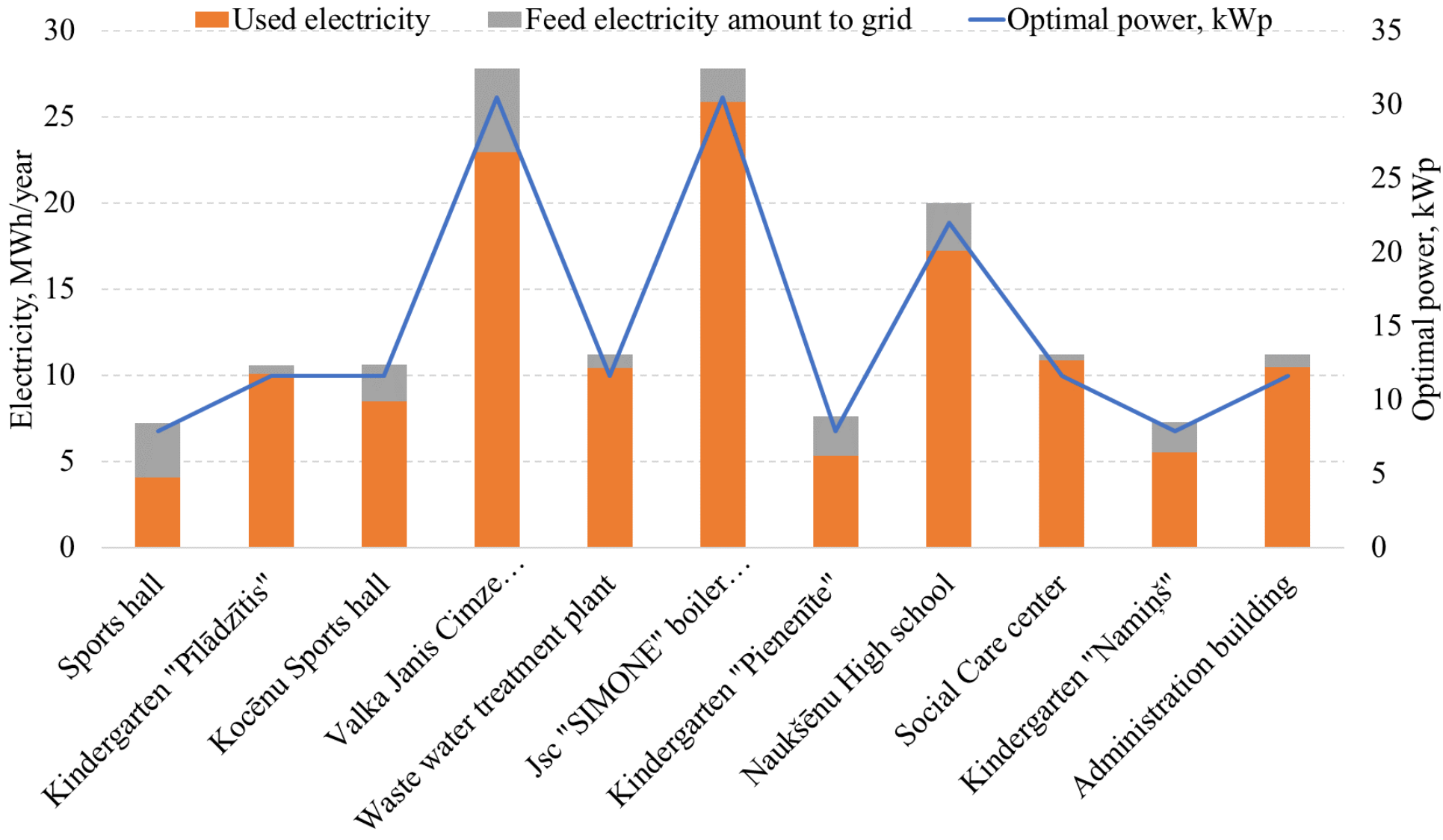
CASE 104

Mapping of potential solar panel ground areas



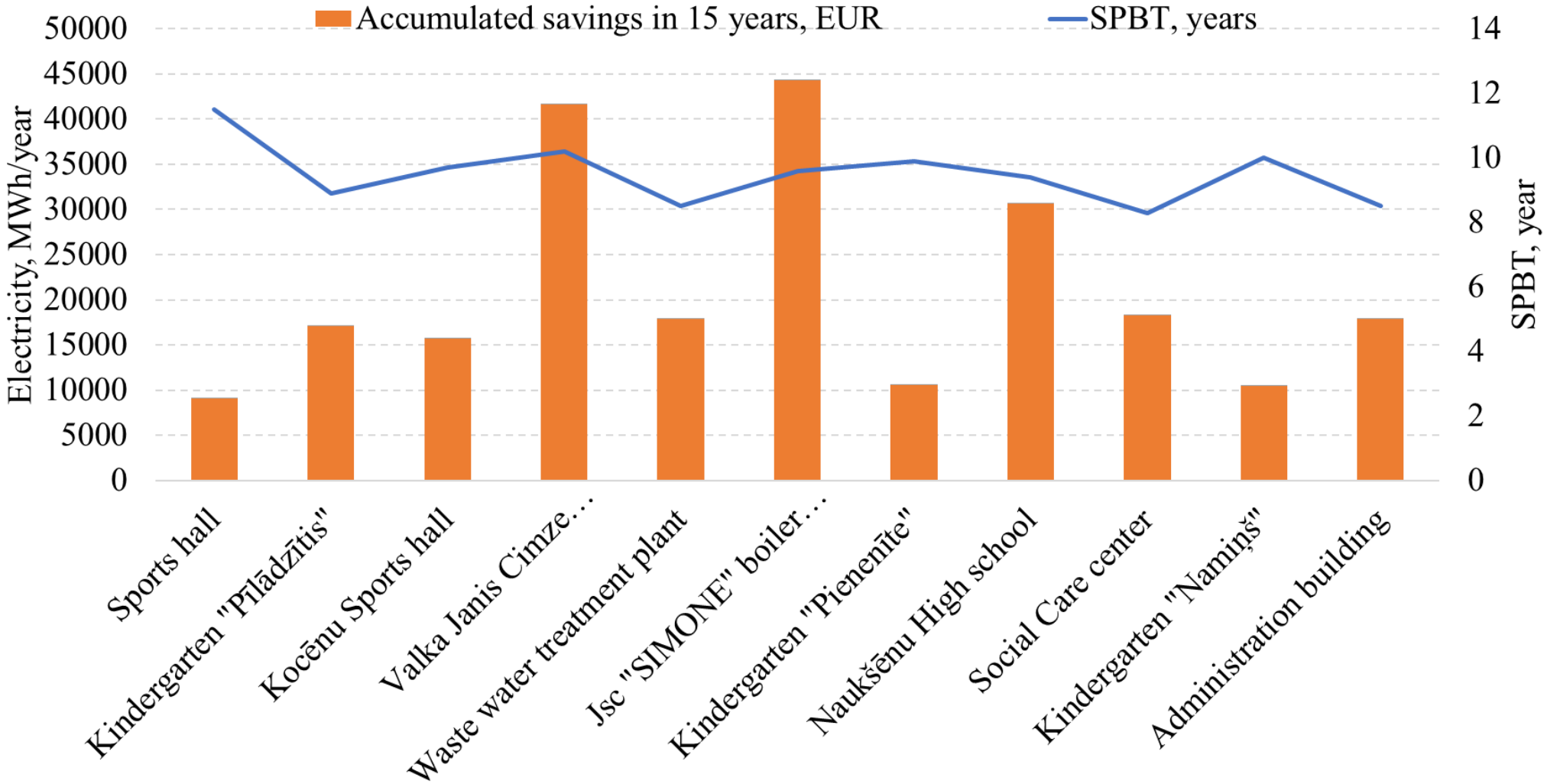
CASE 105

Solar energy feasibility study for 11 Vidzeme planning region buildings



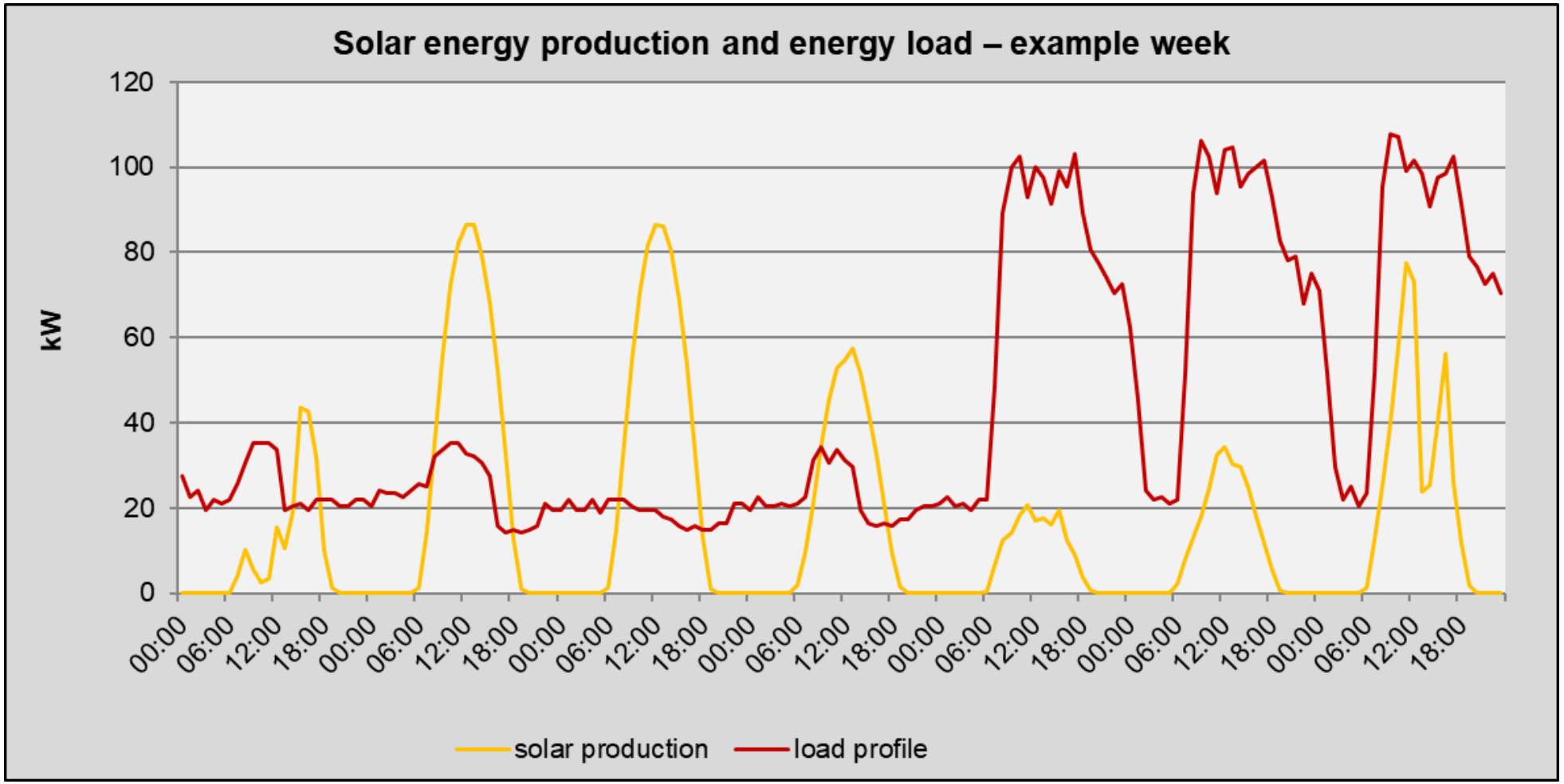
CASE 105

Solar energy feasibility study for 11 Vidzeme planning region buildings



CASE 105

Solar energy feasibility study for 11 Vidzeme planning region buildings



Kontakti

Jānis Ikaunieks

Energy efficiency expert

Vidzeme planning region

Mob.: 26349224

E-pasts: janis.ikaunieks@vidzeme.lv

www.vidzeme.lv