

# **Promoting Cleantech through Public Procurement**

**Saving the environment and offering opportunities  
for businesses**



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# Agenda

- **Background**
  - What is cleantech procurement?
- **Benefits for companies**
  - Results from the survey
- **Cases**
  - and conclusions

# **CLEANTECH** encompasses products, services, processes and solutions that...

reduce negative environmental impacts remarkably during the life cycle

are cost efficient and compete favorably on price

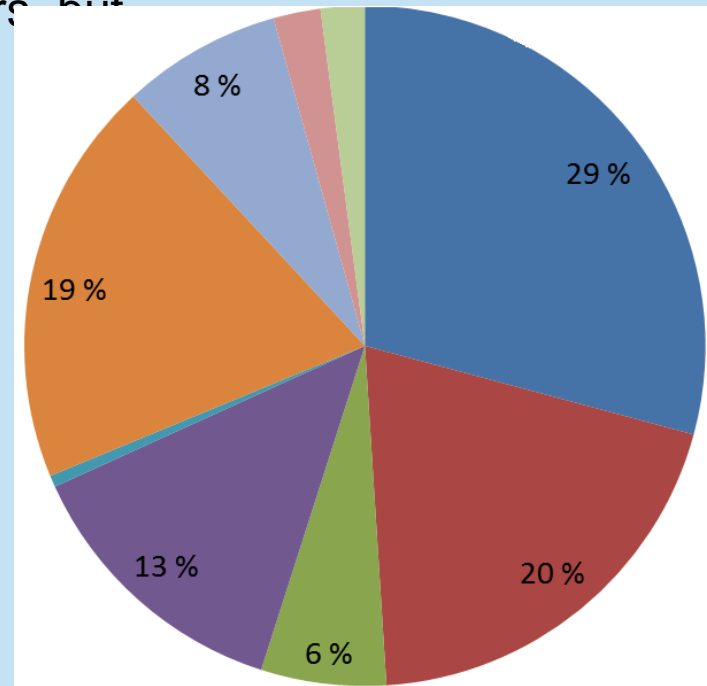
are based on (commercialized) technology

represent innovative or novel solution

provide business opportunities and references for companies

# Cleantech in public procurement

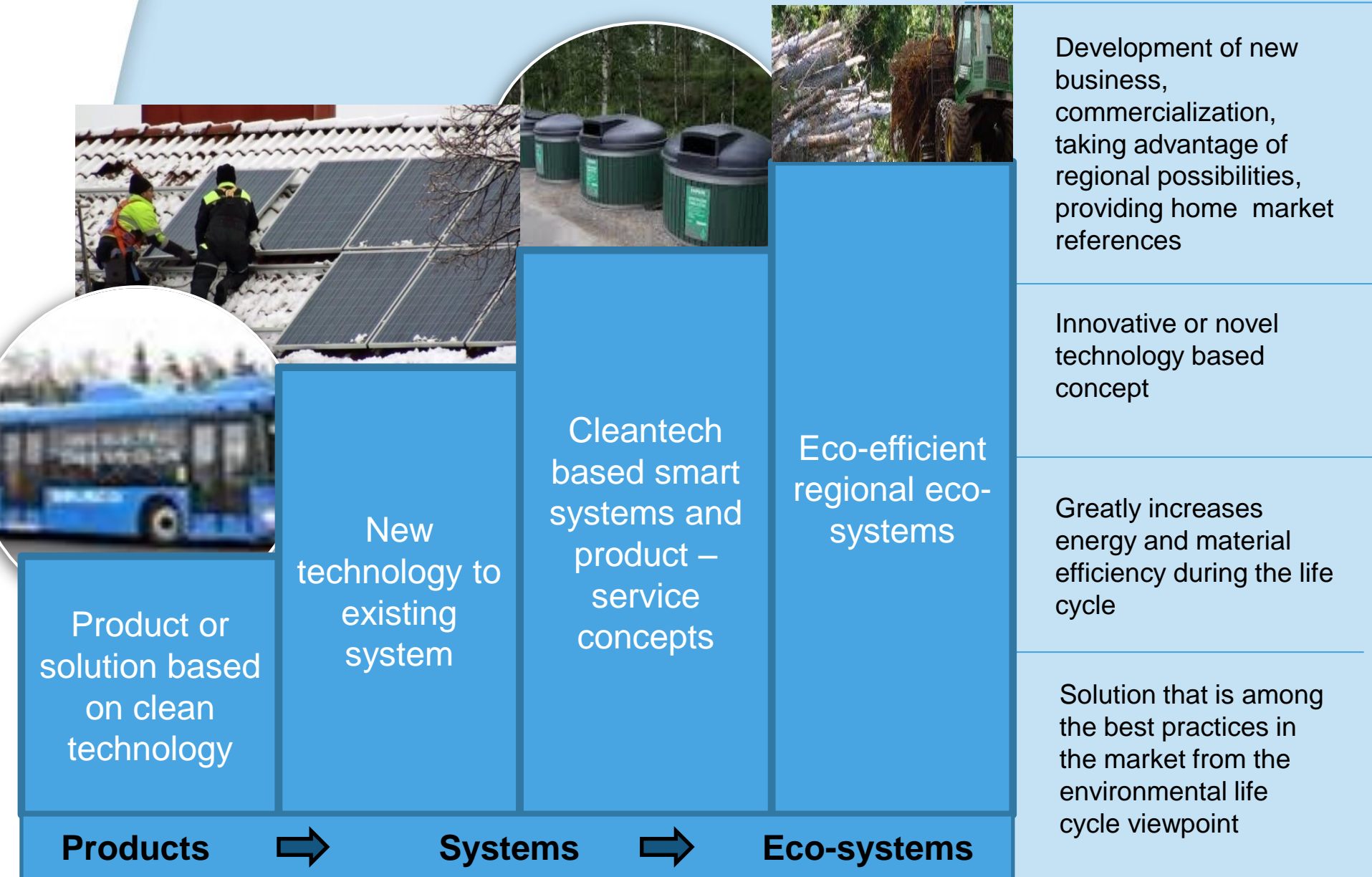
- Finnish Government has set an objective of 350 million €, i.e. 1 % of the total value of nation's annual public procurement expenditure to be targeted to cleantech solutions
- Cleantech can be applied to different sectors but
  - Construction and reconstruction
  - Road infra and transportation
  - Energy production and delivery
  - Water and sewage
  - Waste managementhave been recognized most suitable categories for cleantech solutions



Investments for 13 Finnish municipalities (HINKU) between 2013-2015



# Cleantech in procurement



## **How does public procurement promote business?**

### **Views from cleantech SMEs and start-ups**

- 50 responses, 80 % either start-ups or SMEs
- Almost for all the companies (90 %) internationalization is on the agenda (Business builds upon fast growth)
- Tender competition was seen beneficial even without winning the bid
- More than half of the companies considered public procurement very important or important to business from the viewpoint of profitability and growth
- However, almost half of the companies considered the field of public procurement difficult or challenging
- 60 % of the respondents actively search for dialogue and marketing opportunities with public authorities

# How does public procurement promote business?

## Views from cleantech SMEs and start-ups

1. Experience on how public sector operates -> possibilities to better succeed in the forthcoming tender competitions
2. Increase in turnover
3. Support for R&D
4. Increased visibility of the company in the area and nationally
5. Home market references (for international markets)
6. Networking and new partners -> new tendering procedures (e.g. alliances)
7. New customers nationally and internationally
8. Development of new innovative solutions



# How can public procurement create and promote regional eco-systems - Cases

- Biogas buses – Vaasa
- Solar Energy swimming hall – Pori
- Water pump – Lappeenranta
- Heat plant – Eno
- Electricity cars – Ii
- Solar panels – Joint procurement



# Biogas buses - City of Vaasa

City of Vaasa

Service provider



Pirjo Ferin

**Tender competition:**

Procurement of transportation service for 5 years



vaasa.fi

**Tender competition:**

12 biogas buses to the use of service provider

**Agreement:**

Locally produced biogas for the use of 12 buses (starting 2015)

Biogas provider  
(Stormossen Ltd)



Tuuli Mälymaa



Stormossen

**Tender competition**

Vehicle manufacturer



yle.fi

Delivery system provider



Kuva: Envor.fi

# Solar energy swimming hall

## City of Pori

- Objective was to re-construct a swimming hall to use minimum amount of energy and focus on solar energy production
- Procuring unit stated that the local knowledge and expertise in the field of solar energy must be utilised (e.g. Satakunta University of Applied Sciences)
  - The tenderer must be able to organize a data transfer to SAMK where energy solar research was undertaken
- The innovative copper based solution was found during the procurement
- Increasing jobs in the field of solar energy



Foto: Jouni Koivukoski

# Water Pump – City of Lappeenranta

- New water pump was needed for better water quality
- Extent market research was done
- Innovative energy-efficient water pump technology was being developed in LUT (Lappeenranta University of Technology) but not commercialized yet
- This prototype saved 30 000 € more in energy costs per year compared to best available technology on the market
- The city of Lappeenranta decided to procure wind power (or solar energy) to provide the energy needed for the pump



Foto: Aki Fihlman

- The product is aimed at international markets
- City of Lappeenranta provided an important market reference (from test to production)



Foto: Katriina Alhola

# Heat Plant – Municipality of Eno

- Based on the political decision by the municipality
- Cheaper heat for consumers compared to light fuel oil
- Saving in the amount of oil is approximately 2 million liters annually
- Saving for the local economy approximately 2 000 000 €
- CO<sub>2</sub> emissions have reduced around 5 000 tons annually
- Additional annual employment is between 7 – 10 man years



Source: Eno Energy ([www.enonenergia.fi](http://www.enonenergia.fi))





## Electricity cars – Municipality of Ii

- Municipality of Ii procured 5 electricity cars for the use of personnel
- Governmental support for the investment was 30 %
- More than 10 000 kg CO<sub>2</sub> emission reductions compared to conventional cars
- Wide charging net over the town
- Amount of electricity cars has increased also among the citizens in the area



# Solar panels leasing agreement – Joint Procurement

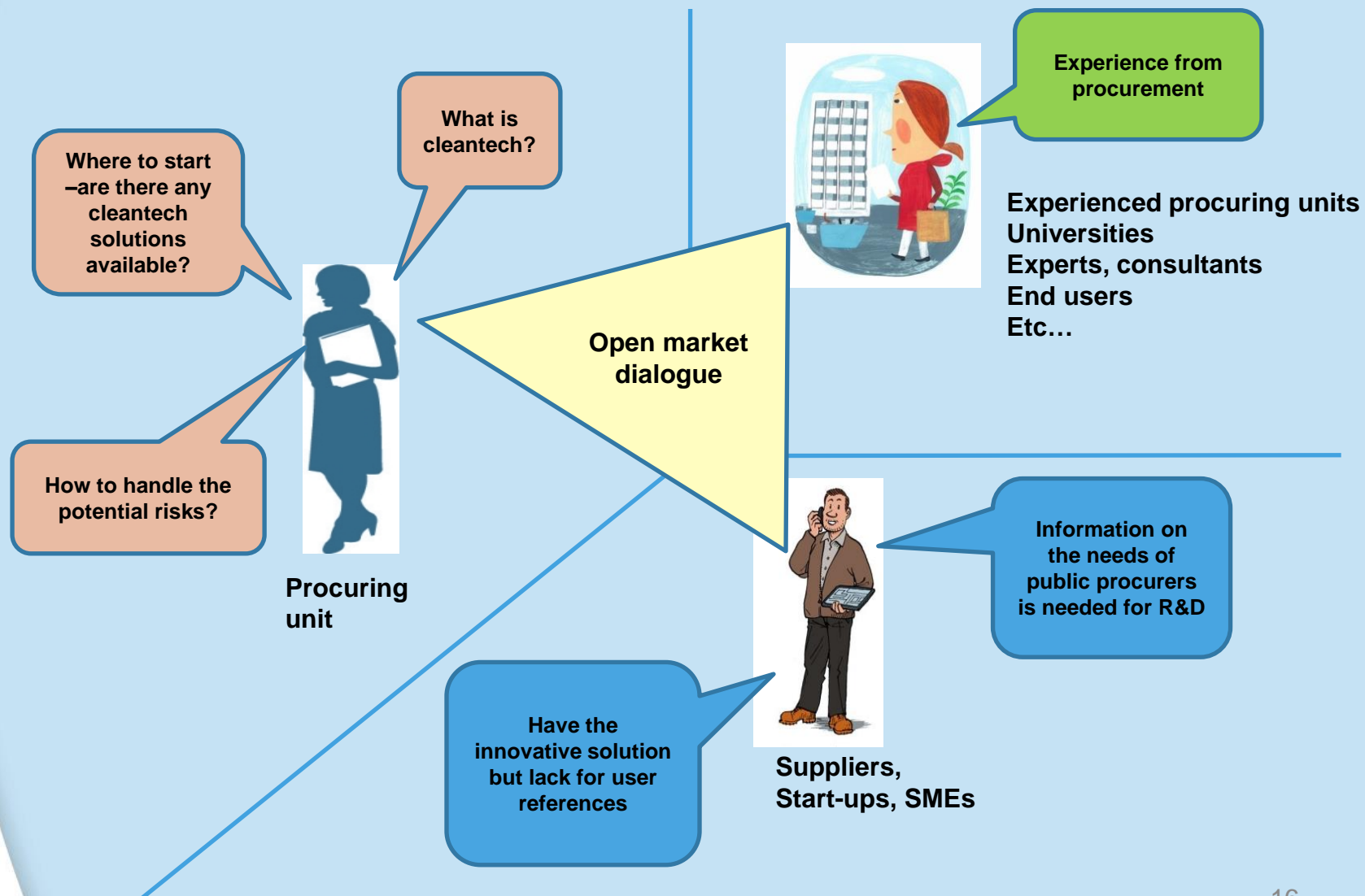
- 5 municipalities, SYKE as an organizer
- Call for tenders (panels and financing) in June 2015, decision in July
- Based on leasing
- Pilot project on solar energy leasing
  - More extensive procurement -> experiences as basis for larger procurement in 2016



# Public authorities taking the leading role

- The possibilities of the market and networks in the region are recognised
  - This may require different research and studies of the possibilities
  - Time spent to the planning phase
  - Well defined own procurement need
- Open and continuous dialogue between suppliers and other actors before the procurement process
- Joint procurement
  - Cost efficiency and less duties / risk in the process
- Life cycle and circular economy –view to decision making
- Financing possibilities
  - Flexible solution, e.g. leasing
  - Financial support
- Open-minded and committed procurers and strategic support

# Successful cleantech investment calls for dialogue between different stakeholders







- More about the project  
[katriina.alhola@ymparisto.fi](mailto:katriina.alhola@ymparisto.fi)  
[www.syke.fi/hankkeet/hankintamappi](http://www.syke.fi/hankkeet/hankintamappi)
- More examples of Finnish public cleantech procurement cases  
[www.ymparisto.fi/hankintamappi](http://www.ymparisto.fi/hankintamappi)