

Data Requirements for Tracking of SDG7 Indicators

- Are the existing indicators comprehensive, robust and comparable?
- How the existing indicators can be improved?
- Role of regional cooperation and knowledge sharing



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Devil is in Detail: Need for Disaggregation

- Energy access: share of population with access
 - ➔ **Improvement:** Share of rural and urban population
- Renewable energy share in final energy
 - ➔ **Improvement:** RE in heat, electricity, mobility
- Energy intensity: primary energy per GDP
 - ➔ **Improvement:** Sectoral tracking (households, industry, transport)
 - ➔ **Challenge:** Considering the heterogeneity between countries (climate, economic structure, etc.)

Common and Public platforms for sharing data

- Example: Nordic Energy Research

(<http://www.nordicenergy.org/indicators/>)

- Publishing high temporal resolution data of the energy system
- Involvement of research institutions, private sector, and other stakeholders

- Open access initiatives

- Transparency platform ENTOSE-E

- Metering, digitalization, and involvement of *citizen-scientists*

(for example, using mobile phone apps for analysing mobility pattern)

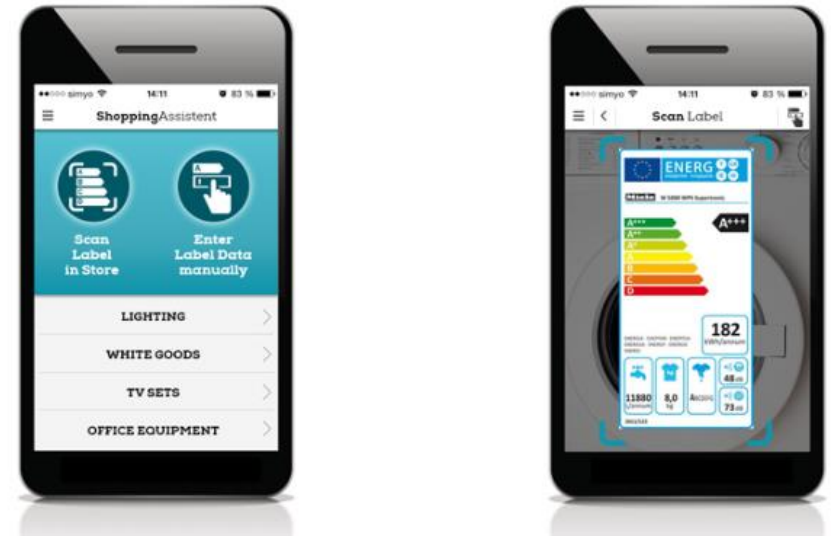
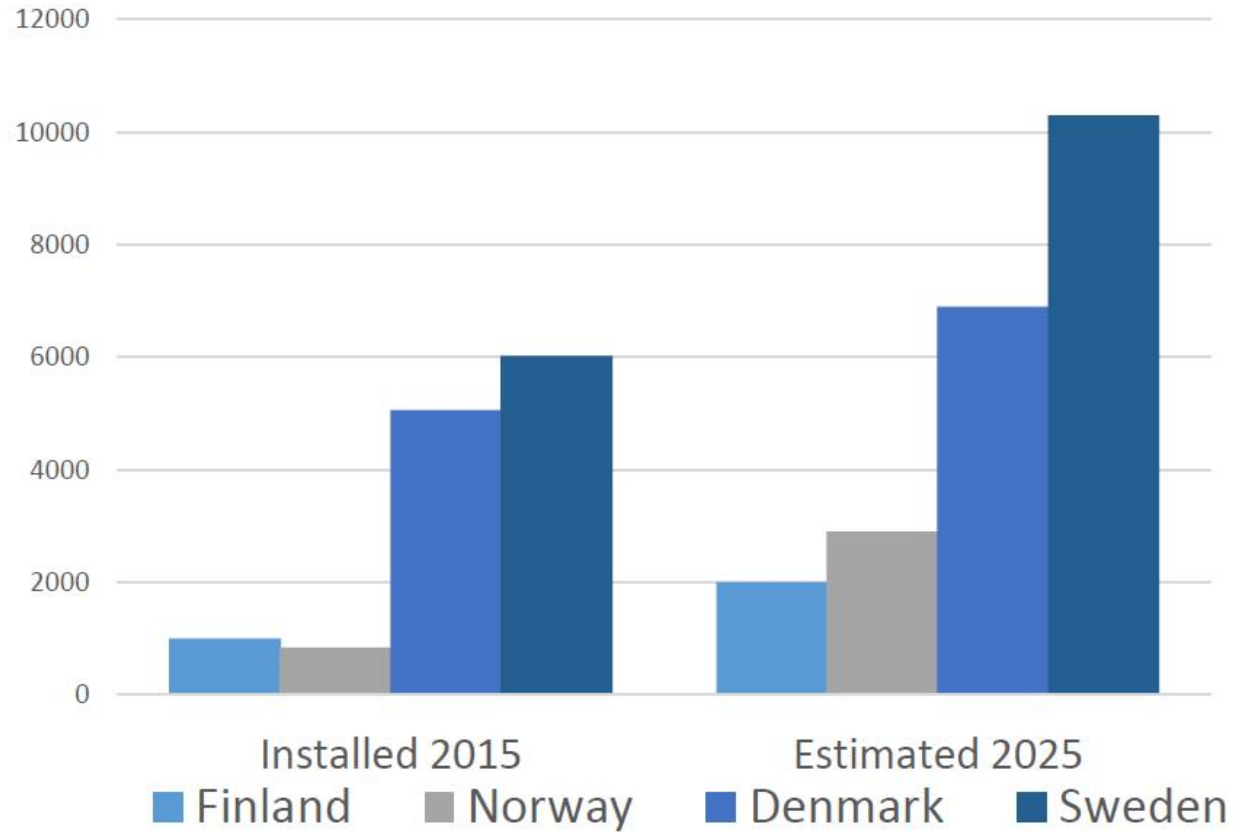


Image: Ecostandard.org

Role of Regional Cooperation

Nordic market: Over 22 GW of windpower planned by 2025!

In 2016, 13.5 GW wind



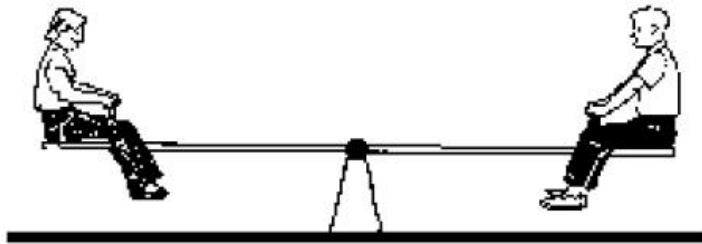
Trends that challenge the Nordic power system

There is **surplus** of energy

BUT

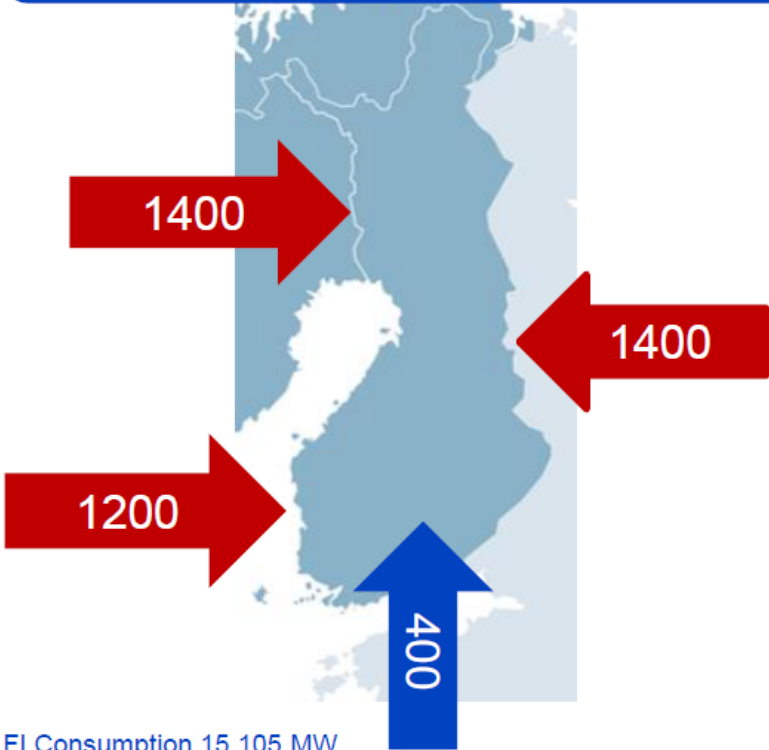
there will be **scarcity** of

- ✓ peak power
- ✓ flexibility
- ✓ rotating mass to support system stability



Market mechanism proved it's benefits during the peak load season

All-time peak load record
in Finland 7.1.2016



FI Consumption 15.105 MW
FI Production 10.874 MW
FI Day-ahead price: 99 €/MWh

Almost one-third of peak demand were imported without any problem!

Well functioning electricity markets ensures efficient utilization of cross-border connections