NET-METERING AND SELF-CONSUMPTION SCHEMES IN EUROPE

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Content

→ What is self-consumption?
→ Self-consumption incentives and net-metering: how does it work?
→ Overview of schemes in Europe
→ Recommendations to enhance self consumption
What is self-consumption?
Self-consumption and net-metering schemes in Europe

Self-consumption – residential prosumer standard profile

![Graph showing self-consumption and net-metering schemes in Europe](image)

- **PV Production**
- **Load**
- **kWh**
- **Consumption**
- **Production**
- **Self-consumption**

European Photovoltaic Industry Association
Self-consumption and net-metering schemes in Europe

Residential: self-consumption rate potential in key EU markets (without storage)

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Self-consumption and net-metering schemes in Europe

Consumer profiles in the commercial segment

Standard load profile for different kind of commercial industries
Self-consumption and net-metering schemes in Europe

Commercial Segment: self consumption potential rate for 2 profiles

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Net-Metering and Self-consumption schemes: How does it work?
SELF-CONSUMPTION INCENTIVES

→ Main types of incentives:

• **Direct:** Self-consumption premium (former DE and IT schemes)

• **Indirect:** FiT or support is < retail electricity price (DE, IT)
NET-METERING / NET-BILLING

Net-Metering
• Physical compensation of your PV production volume over your consumption volume during a set period of time (year/month/day/hour) (meter turns backward)
• = resulting in a simple billing arrangement
• Incentive = savings on the electricity bill

Net-Billing:
• Economical compensation of your PV electricity production value over your consumption value during a period of time
Overview of schemes in Europe
OVERVIEW OF MAIN NET-METERING AND SELF-CONSUMPTION SCHEMES IN EUROPE

**DE:** Self-consumption encouraged with lower FiTs Market integration Model since Aug. 2012 (<1000 kWp)

**IT:** Scambio Sul Posto (≈ net-billing) where compensation < electricity retail price (< 200 kWp)

**NL:** Yearly Net-metering < 3x80 A

**UK:** Self-consumption right + Export tariff (<30 kWp)

**BE:** Yearly Net-metering (<10 kVA)

**ES:** Self-consumption allowed (<100 kW)

**TR:** Daily Net-metering (< 1 MWp)
Current state of net-metering and self-consumption schemes in Europe

→ **Germany:** Self-consumption is a key driver of the 2013 market (95% of systems commissioned): Since 2012 no more self-co premium, Driver: retail electricity prices > FiT
  - Discussion on financing of grid operators ongoing due to reduced revenues

→ **Italy:** Self-co premium + FiT ended in June 2013.
  - Difficulty to restart market with current only scheme: scambio sul posto (net-billing scheme). However retail price > scambio sul posto support which is relatively attractive
  - ➔ need public support to communicate on scheme

→ **UK:** self-consumption is allowed + generation tariff + export premium = attractive scheme compared to Italy or Germany

→ **Belgium:** net-metering provoking reactions from DSOs to get refinanced
  - Flanders set fix grid fee linked to installed capacity to finance DSOs: unfair for existing systems; preventing further development
  - Wallonia thinking of similar measure

→ **Netherlands:** combined net-metering and grant driving maket. So far no issue with DSOs. Limit of max production for compensation (5000 kWh) removed

→ **Denmark:** small scale yearly net-metering stopped in Nov 2012 due to loss of tax revenues for the government. Only hourly net-metering remaining, DSOs asking to get compensation for lost revenues

→ **Spain:** Self-co was allowed in Nov. 2011 however missing regulatory framework; recent proposal from government to get a back-up toll which will affect also self-consumed share of electricity
What makes Self-consumption work

- Easy administrative scheme (administrative costs share in Italy = 10 x level of Germany)
- Energy-saving behaviour ➔ necessity for a change in mindsets
  - Communication from public authorities
  - Marketing strategy evolution from companies
- Long term savings expectations
  - Awareness on raising electricity prices
- Attractive Financial support
  - Investment repays over longer period than with FiTs
What about other European countries?

FR
On-going consultations on self-consumption

CZ
On-going discussions on net-metering

SK
On-going discussions on net-metering

CH
Self-consumption from 2014.

PT
On-going discussions on net-metering/self-con

GR
On-going discussions on net-metering
Recommendations to enhance self consumption
Recommendations

- Lift all regulatory barriers to self consumption
  - Give the right to self-consume. In many countries it is not the case yet, or simply not worth

- Phase out regulated electricity prices and other regulatory barriers
  - Retail electricity prices should reflect actual electricity prices. Artificially low prices (e.g. Spain, Greece or France) prevents development of self-consumption or net-metering

- No exposure of self-consumed electricity to grid costs, adapt grid charges based on consumer profile/impact
  - Spanish example with a back-up toll is the example of a wrong measure
  - Flemish grid charge based on installed capacity do not reflect the consumer load profile

- Socialise network operation costs for electricity fed into system (as for other generators) and secure adequate remuneration
  - Remuneration of grid operators is needed but it should be socialised among consumers
  - French injection fee is not fair, cost should be socialised among consumers

- Support enablers, such as smart meters, smart prosumer storage and Demand Side Management
  - German storage incentive is a first step
EPIA Position on Self-Consumption

→ Download it on:

THANK YOU FOR YOUR ATTENTION

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