 Unsere Energie gehört der Zukunft.
Regulation of self-consumption in Austria
• Electricity price in Austria
• What is self-consumption
• Net-metering
• „gemeinschaftliche Erzeugungsanlage“ – collective generation plant
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Electricity price in Austria

Based on consumption and load

Based on consumption

ZUSAMMENSETZUNG STROMPREIS
HAUSHALT MIT JAHRESVERBRAUCH VON 3.500 KILOWATTSTUNDEN STROM, WIEN

- CHP charge
- RES charges
- Community levy
- Electricity duty
- Value added tax

Quelle: E-Control, Stand 1.1.2018
In general 1.5 Cent/kWh

For self-consumed electricity

The prosumer is responsible himself for paying the duty

Free for up to 5,000 kWh for self produced and consumed electricity

Free for up to 25,000 kWh for self produced and consumed renewable electricity
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Self-consumption

• On-site production and consumption
• Without using the public grid
  – best example - alpine huts stand-alone power system
  – Companies with on-site power plants

• Austria – self-consumption
  – no network charges or connected charges (green electricity surcharge)
    • It’s not exempted BUT the system is built on “electricity taken from the grid”
  – Electricity duty – electricity consumed
    • Up to 5,000 kWh no fees
    • For renewable electricity up to 25,000 kWh

• Germany – self-consumption
  – operator („Betreiber“) and consumer have to be identical
  – no “EEG-Umlage” for PV smaller 10 kW and up to 10 MWh
  – 30/35/40% of “EEG-Umlage” for other self consumption
• There is no direct support for self-consumption in Austria
• Profitable via price difference
• Electricity take from the grid costs around 20 Cent/kWh for households

You save at least this share via selfconsumption
Effects of self-consumption

- Self-consumption isn’t uncommon on a larger scale
- Somehow “new“ for smaller installations
- Check what consumed electricity contributes to the system
  - How are network charges designed
  - How are additional charges designed
  - Electricity consumed or electricity taken from the public grid
- The less charges on self consumed electricity the more attractive self-consumption is
  - Less quantity (if based on electricity taken from the grid) to base grid tariffs on ?!
  - “Energy efficiency effect” – less electricity used due to energy efficiency
Effects of self-consumption

➢ Tarif-system tending towards a more load-based mechanism
  • Costs-by-cause principle
    ○ distribution networks are designed for peak load demand
    ○ Maybe in the future also “peak load supply” (via decentralized production) ?! – there are no indications for this right now

• For households
  • Incentive for smart meters to meter load vs. fixed load profile
  • Self-consumption plus storage getting more and more attractive
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Definition – net metering

• Key factors
  – On site production, consumption and excess electricity is supplied to the grid
  – Metering system
  – Time frame

• Old (analogue) electricity meters can spin backwards
• Thereby the electricity consumed and supplied to the grid are netted
• Charges commonly are calculated based on load and electricity consumed (taken from the public grid)
• Thereby it’s an extra benefit besides taking less electricity from the grid for the local producer
• Net metering isn’t favoured because of the distortions it causes
• Net metering should be avoided as it implies that system storage capacity is available for free
• It reduces consumers’ timevalue sensitivity to volatile energy prices and hence undermines efforts to enhance flexibility and to develop a wider demand-side response with consumers playing a more active market role

https://www.ceer.eu/documents/104400/-/-/3f246c2a-d417-2a29-d8eb-765bd6579581
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Current situation

- Local energy production and consumption on a smaller scale (compared to big companies which already have their own on site power plants) is just developing
  - Renewable energy directive - renewable Energy Communities
- Unclear situation on apartment buildings or buildings used by various entities
  - Tenancy law (Mietrechtsgesetz), Condominium act (Wohnungseigentumsgesetz)
- To enable the collective usage of locally produced electricity some amendments were made in Austria
Situation as it was – not profitable

[source: „Mehr Sonnenstrom für mich – optimierter Eigenstromverbrauch“ Gemeinschaftliche Broschüre KL.IEN / PV-Austria]
The power plant can be connected to the main cable
  - No separate power inverter per flat needed
Based on a fixed or variable allocation profile the produced electricity is „allocated“ on a 15min basis to the participants
  - One can only allocate as much produced electricity to the participant as he has consumed in the 15min timespan
  - An intelligent metering system is a prerequisite
The DSO is responsible for the allocation (based on the provided allocation profile)
Excess electricity is fed into the public grid and there has to be an existing purchase agreement with a supplier
Situation as it is – more likely to be profitable

[source: „Mehr Sonnenstrom für mich – optimierter Eigenstromverbrauch“ Gemeinschaftliche Broschüre KL.IEN / PV-Austria]
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