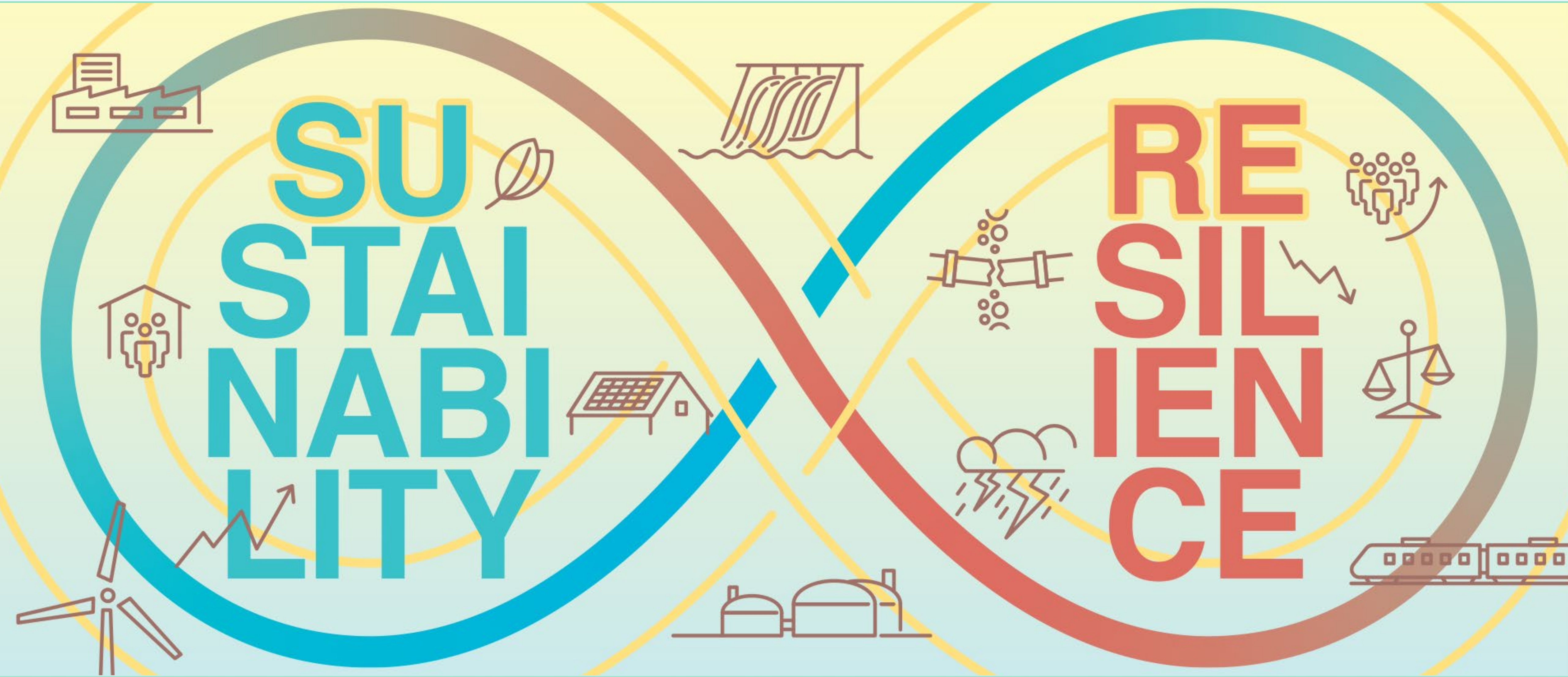
sweet swiss energy research for the energy transition

SURE

21.09.23



WP 2

The changing role of energy companies in Switzerland

Introductory presentation

Reto Müller

Dr. iur.

SELA General Assembly 2023

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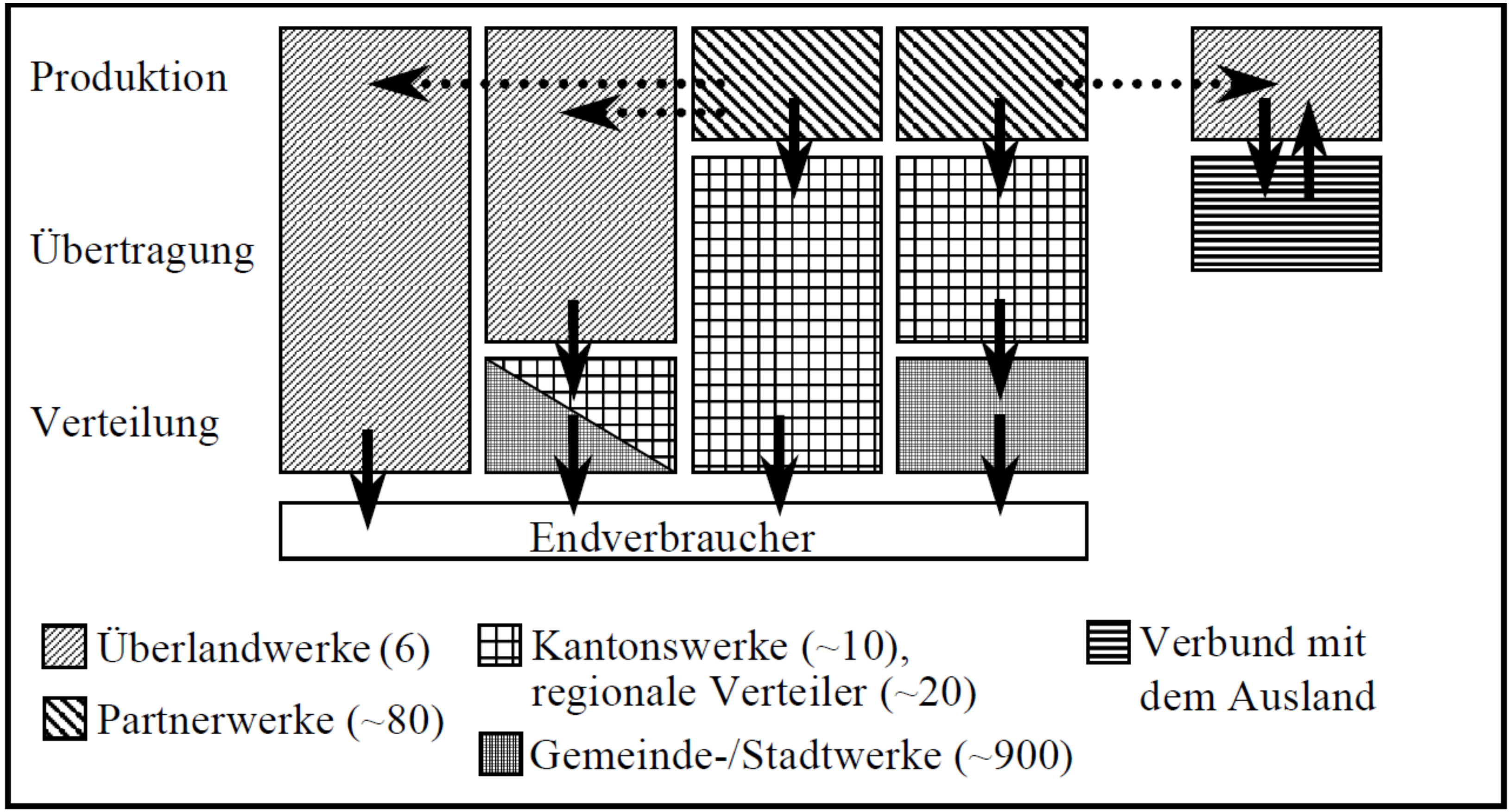
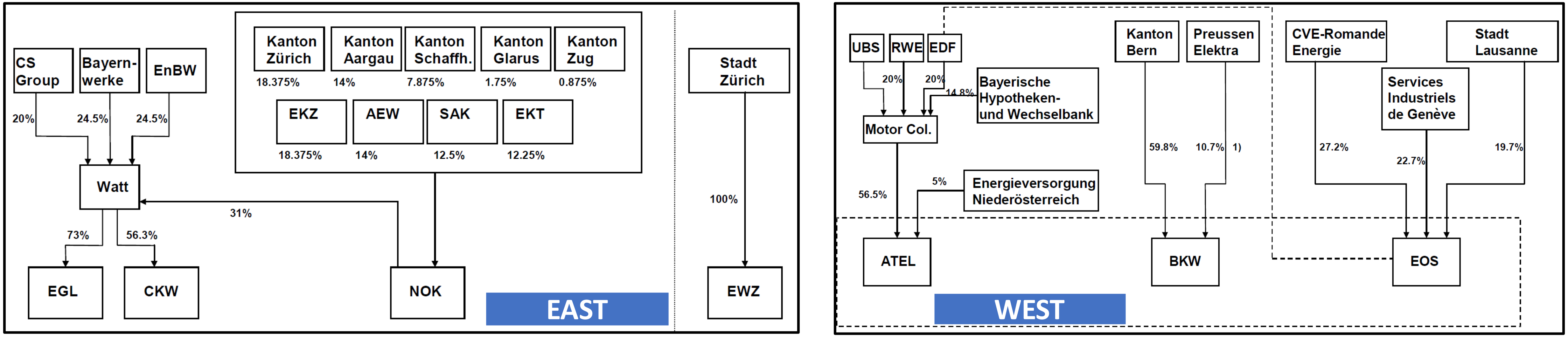
The «old world»



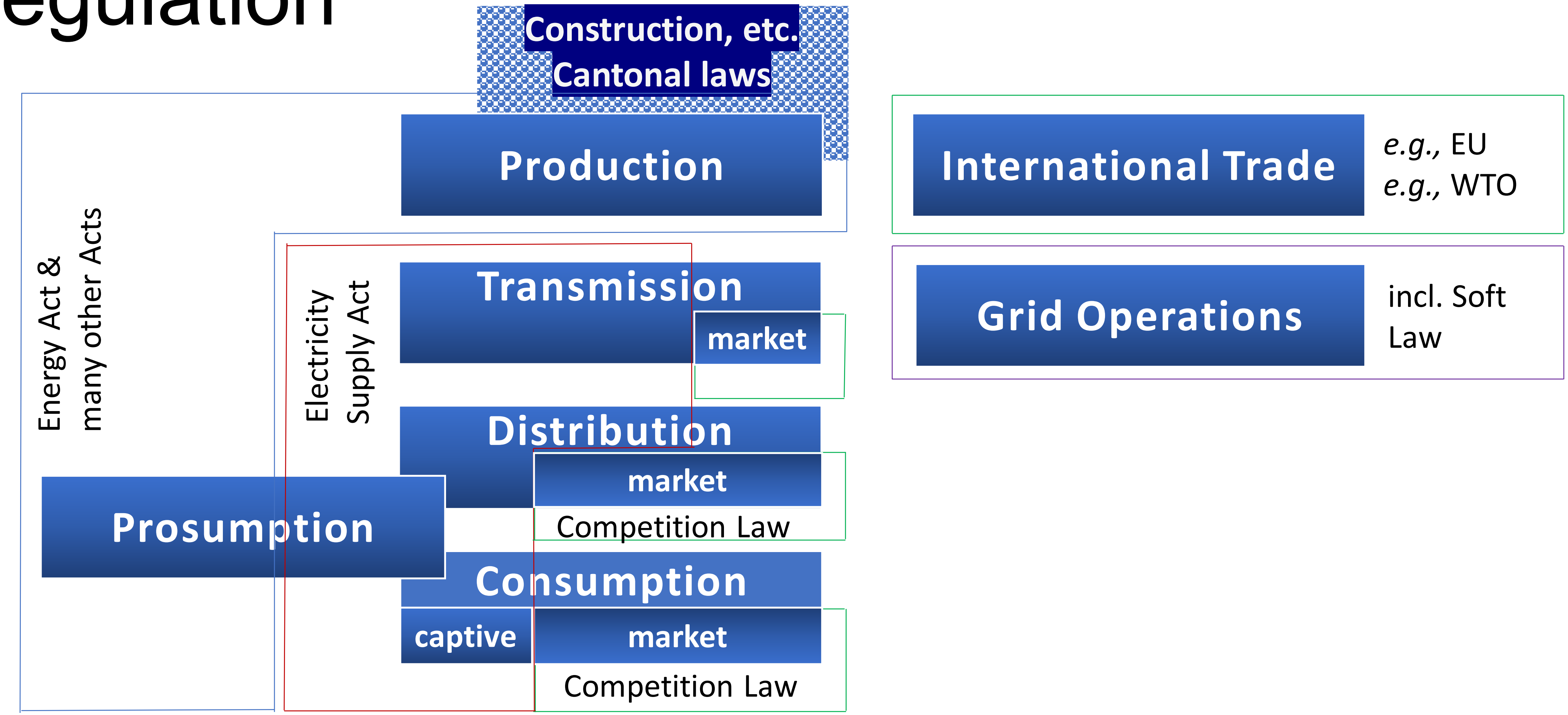
Structure prior to the liberalisation (Botschaft EMG, BBl 1999 7379, 7381 ff.)

The «old world»



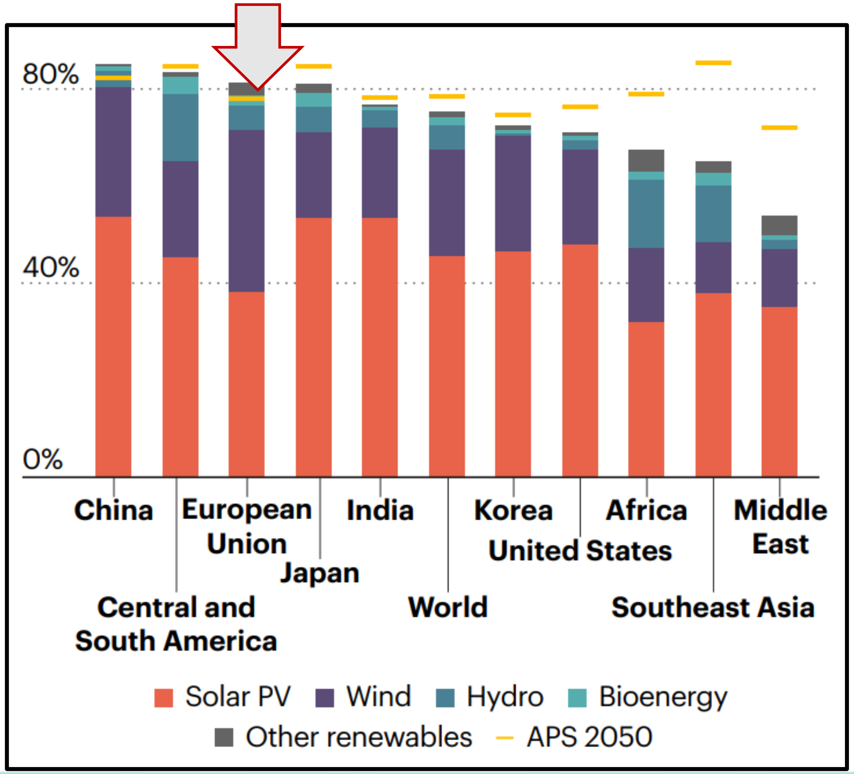
Structure prior to the liberalisation (Botschaft EMG, BBl 1999 7379, 7381 ff.)

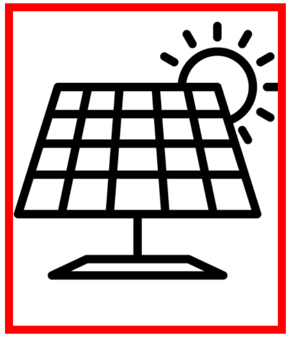
Regulation

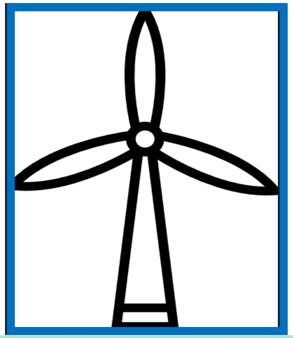

Construction, etc.
Cantonal laws
Production
International Trade
e.g., EU
e.g., WTO
Grid Operations
incl. Soft Law
Energy Act &
many other Acts
Electricity
Supply Act
Transmission
market
Distribution
market
Competition Law
Prosumption
Consumption
captive
market
Competition Law

European Markets: Generation Capacities

- IEA, World Energy Outlook 2022
  - <u>New</u> power capacities till 2050







- Energy Brainpool (Blog)
  - <u>installed</u> generation capacities EU-27 (plus NO, CH and UK)

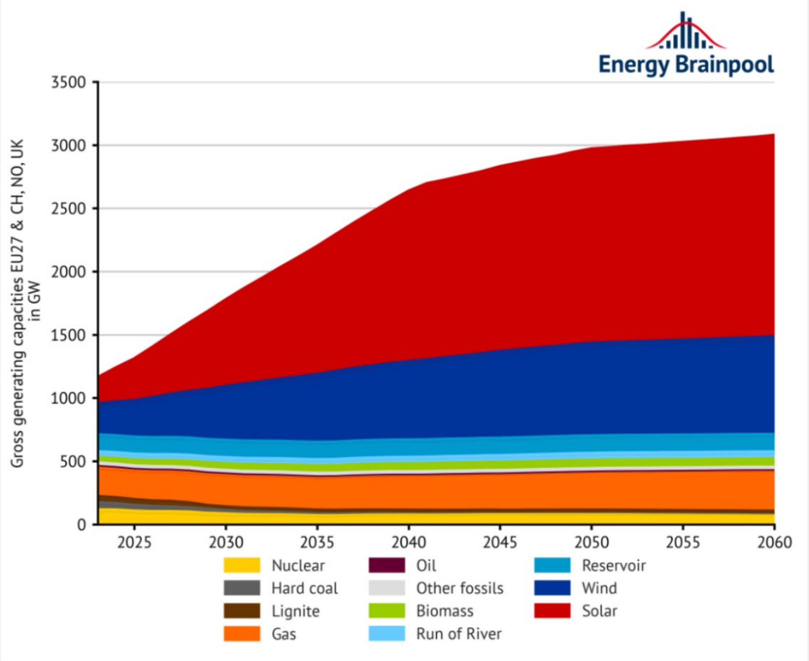
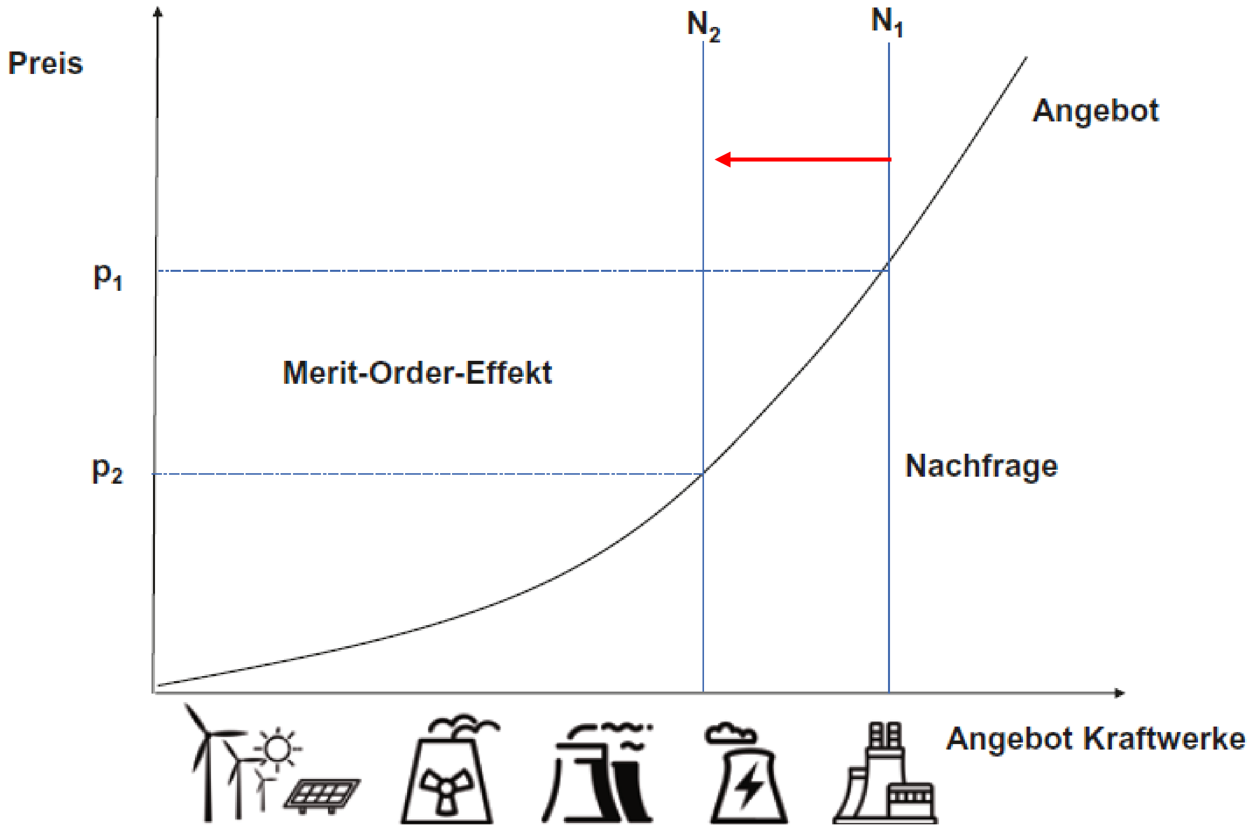


Figure 4: installed generation capacity in EU 27, plus NO, CH, and UK by energy source (Sources: Energy Brainpool, 2022; EU Reference Scenario, 2021; entso-e, 2022)

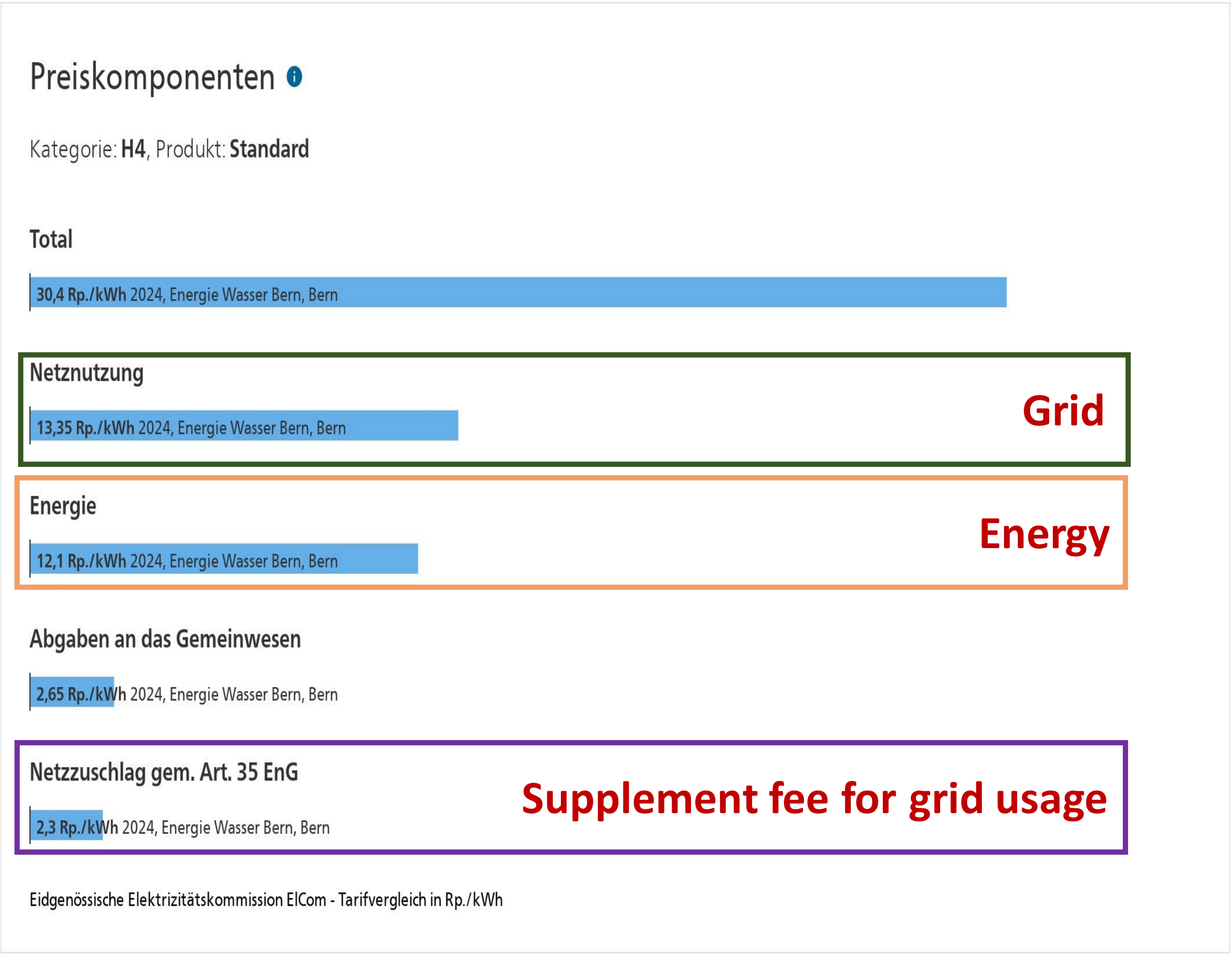
European Markets: Merit Order



Marcel Linnemann, Energiewirtschaft für (Quer-)Einsteiger, 2021, 145

- Energy Only Market
- Political Goals
  - Expansion (normative) renewable energies
  - Financial incentives
- Preferred new capacities
  - Lower capital (or operating) costs
  - Lower incremental costs
- Existing capacities
  - Missing money
  - Squeezed out of the market (deliberately)
  - Change in market structure

Domestic framework conditions



- Grid
  - Regulation
  - Cost Plus, WACC, etc.

«protected»

- Energy
  - Basic supply
    - «Generation costs»
    - «Average price method»

«not too bad»

  - Consumers in the market
    - Market Price

«tricky»

- Supplement fee
  - Financing «subsidies»
  - Financing «special markets»

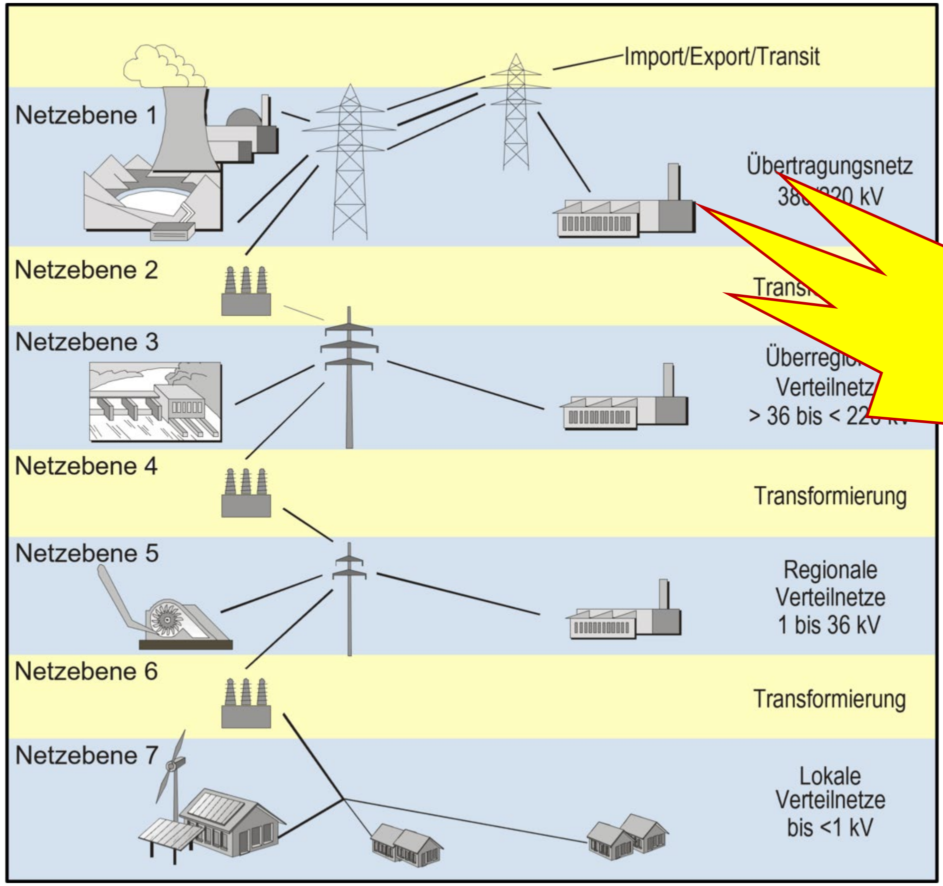
«wanted»

- International

«very tricky»

Domestic framework conditions

- Grid



- Production (examples)

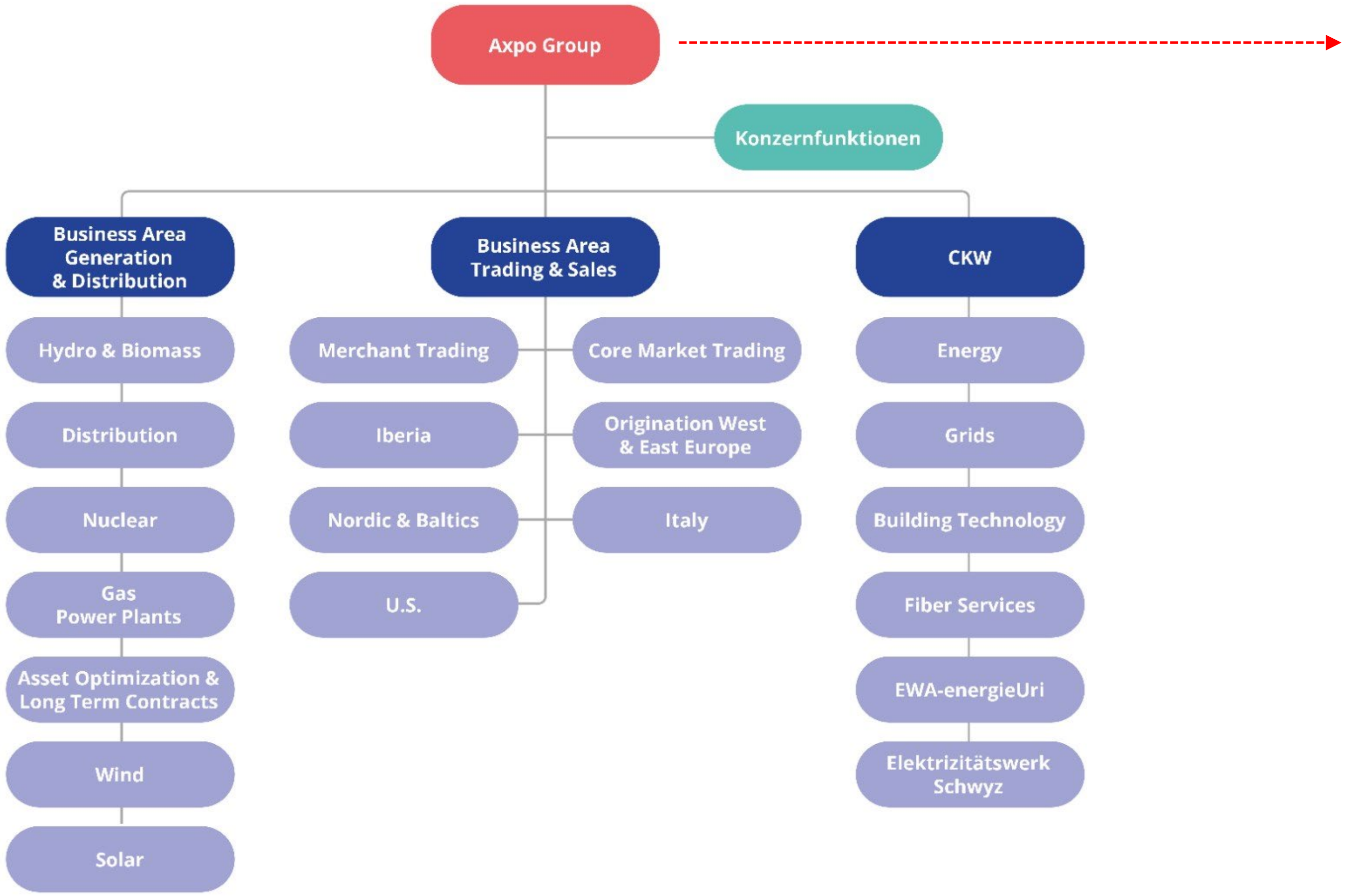
Security of supply

Quo vadis?

- Developments
  - **Implementation grid strategy**
    ☞ Confederation / grid providers
  - **Funding Renewable Energies**
    ☞ Confederation / European states
  - **Subsidy for large hydropower**
    ☞ Confederation
  - **Hydropower/Winter reserve**
    ☞ Confederation / producers
  - **Emergency power plant**
    ☞ Confederation
  - **Electricity Agreement?**
    ☞ Confederation – EU
  - **Exclusion Swissgrid from markets**
    ☞ EU (Commission)

- Responsibilities
  - **Grid** (federal legislation)
    - Transmission grid
      ☞ Confederation / Swissgrid (TSO)
    - Distribution grid
      ☞ States / state owned companies
  - **Production**
    - Energy only market
      ☞ «the economy»
    - Scaling up renewables
      ☞ (state financed) economy
  - **Security of Supply**
    - Confederation
    - Highest subsidiary

Quo vadis?



- 100 % state owned
  - Zürich
    - 18,342 % directly
    - 18,410 % by EKZ
  - Aargau
    - 13,975 % directly
    - 14,026 % by AEW Energie AG
  - Schaffhausen 7,875 %.
  - St. Gallen
    - 12,501 % by SAK AG
  - Thurgau
    - 12,25 % by EKT Holding AG
- States' duties/Strategy?

Further information

- **International Energy Agency, Energy Policy Review Switzerland 2023**
- **International Energy Agency, World Energy Outlook 2022**
- **European Commission, Energy Roadmap 2050**
- **www.ELCOM.admin.ch → Documentation → Mitteilungen**
- **Strategische Verantwortung oder verantwortungsvolle Strategie? Über Zuständigkeiten von Bund und Kantonen in der Stromversorgung, Schweizerische Juristen-Zeitung, 15. November 2023**

Discussion

Stay tuned for… SURE

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Swiss Federal Office of Energy SFOE

The content in this presentation was carried out with the support of the Swiss Federal Office of Energy SFOE as part of the SWEET project SURE. The presenenters bear sole responsibility for the conclusions and the results presented.