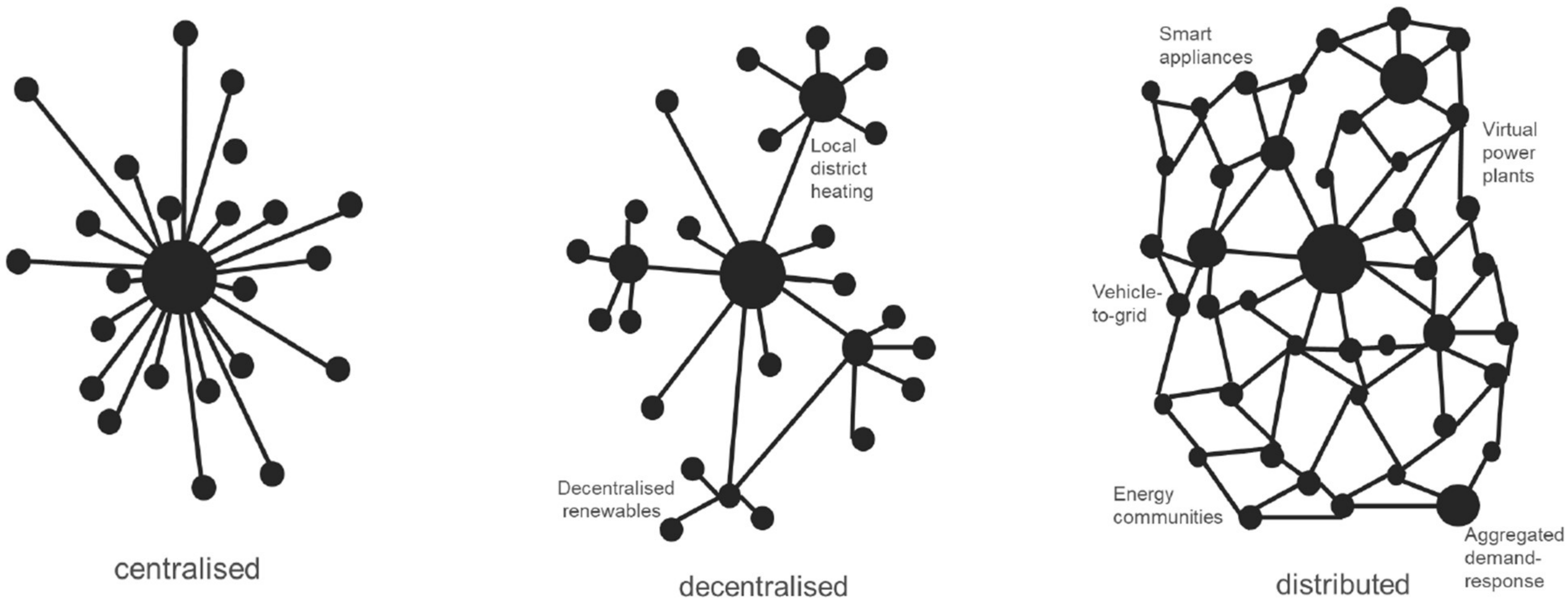
Challenges and benefits of energy transition – a MS perspective

Wolfgang Urbantschitsch, Executive Director E-Control

7th July 2020
Closure Conference EU Twinning Ukraine

From centralised towards more distributed

(Source: European Commission)



Energy System Integration = Smart Integration

Smart integration

Decarbonisation

Digitalisation

Dynamic regulation

- Electrification
- Green (decarbonised) gases and liquid fuels
- Best use of (waste) resources
- Upward integration of decentralised energy flows

Smart energy system integration requires new players and new business models in the electricity sector

E-CONTROL
Unsere Energie gehört der Zukunft.

Pooling

Aggregators

Renewable Energy Communities

Citizen Energy Communities

Peer-to-peer-Trading

Flexible Tariffs

Flexible Demand

Demand Response

Summary:

– CEP fosters the concepts and models
– The new models imply a future-oriented development of energy markets
– The new models generate new competition
– The new models need regulation to ensure security of supply and customer protection

Questions remaining:

- What and who can be competitive on the market?
- What instruments are needed to support the new models?
- Are these models enablers of the "Energiewende" (in the long run)?

The Austrian Case

The cornerstone of the Austrian strategy: **100 % Electricity from Renewables** by 2030

- 1 billion per year for the supporting mechanism
- "Starting point": ~ 75%

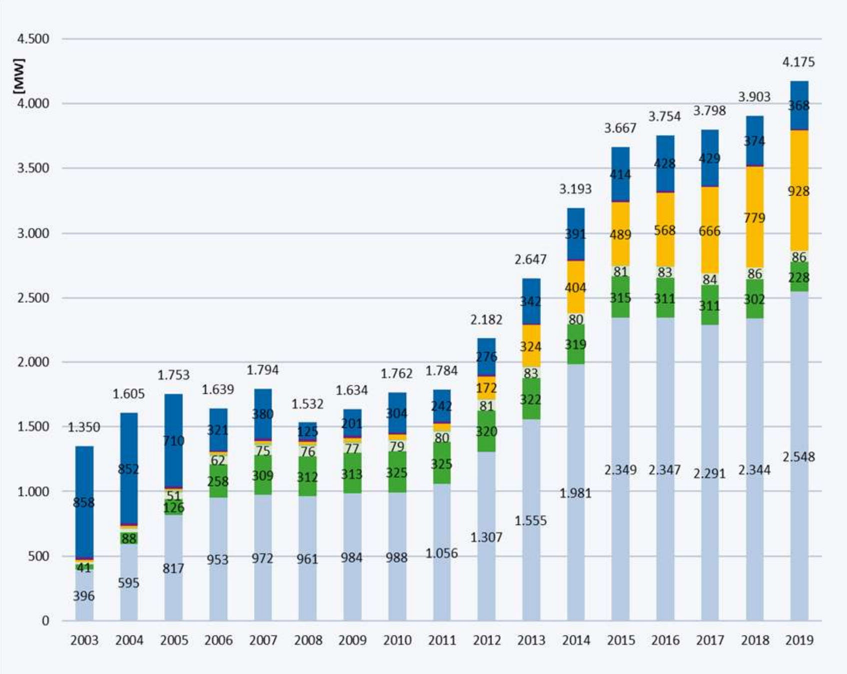
Some additional highlights:

- Phase-out of heating oil for heating purposes
- Phase-out of gas for heating purposes
- More flexibility in the electricity system
- Support of technologies and products: e-mobility, hydrogen, storage, etc.
- Support of services and new business models: demand response, energy communities, peer-to-peer-trading, etc.

Electricity from RES in Austria

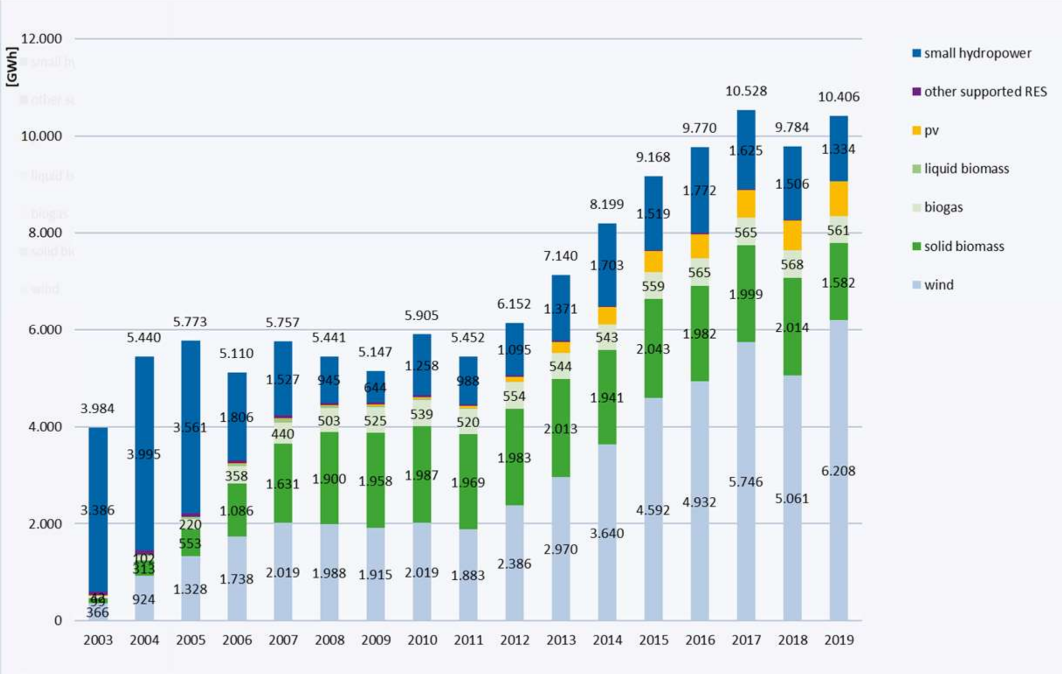
E-CONTROL
Unsere Energie gehört der Zukunft.

Installed capacity



Quellen: E-Control, OeMAG | Februar 2020

Supported RES-E



Quellen: E-Control, OeMAG | Februar 2020

RES-E production as share of consumption in Austria

Austrian targets for the gas sector

- Main goals
  - Increase of injection of renewable gases up to 5 TWh until 2030; 7% of today's gas consumption
  - Phase-out of fossil gas by 2040
  - Innovation leader for hydrogen
  - Full decarbonisation of the heating sector
- **Renewable Gases**
  - Defining potentials and the transformation path
  - Expansion supported by funding program and quota
  - Guarantee of Origins
  - Use of renewable gases mainly in the industry
- **Phase-out of natural gas**
  - Phase-out of natural gas heating systems in new buildings from 2025 on
  - No gas grid expansion, only densification
  - Substitution by district heating in cities
  - No funding for investments in fossil fuels

The challenges for the Regulator

- Changes in the electricity market model: new players, new roles, new responsibilities and duties
- Changes in the tarification (regulated part): change in demand, change in peak-loads over a day, more decentralised electricity generation
- Changes in the competitive framework: new services, new players, new competitors

Energy *for our future.*

E-Control
Rudolfsplatz 13a, 1010 Vienna
Phone: +43 1 24 7 24-0
Fax: +43 1 247 24-900
E-Mail: office@e-control.at
www.e-control.at
Twitter: www.twitter.com/energiecontrol
Facebook: www.facebook.com/energie.control

contact

Dr. Wolfgang Urbantschitsch, L.L.M

+43 1 24724 200

Wolfgang.urbantschitsch@e-control.at

www.e-control.at