

Energy Communities

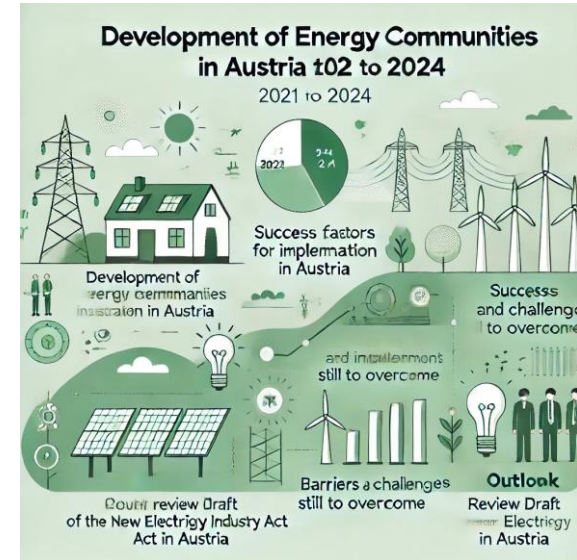
Experiences from Austria



Austrian Energy Agency (AEA)
Angela Holzmann | 16th of October 2024

Agenda

- ▶ Development of **Energy Communities in Austria from 2021 to 2024**
- ▶ **Success factors** for the implementation in Austria
- ▶ **Barriers and challenges** still to overcome
- ▶ **Outlook:** Review draft of the new Electricity Industry Act in Austria



Regulatory Framework

Collective production and consumption



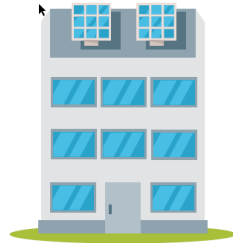
Until 2017
Prosumer

Regulatory Framework

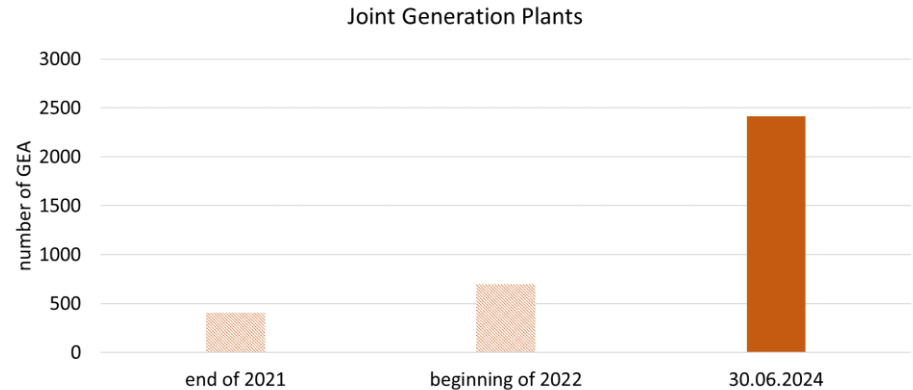
Collective production and consumption



Until 2017
Prosumer



From 2017
Jointly acting
renewable self
consumers

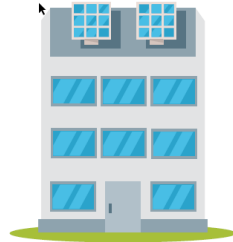


Regulatory Framework

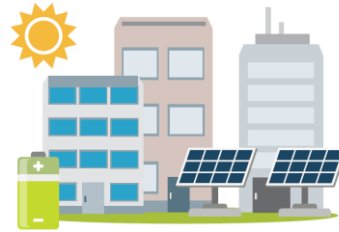
Collective production and consumption



Until 2017
Prosumer



From 2017
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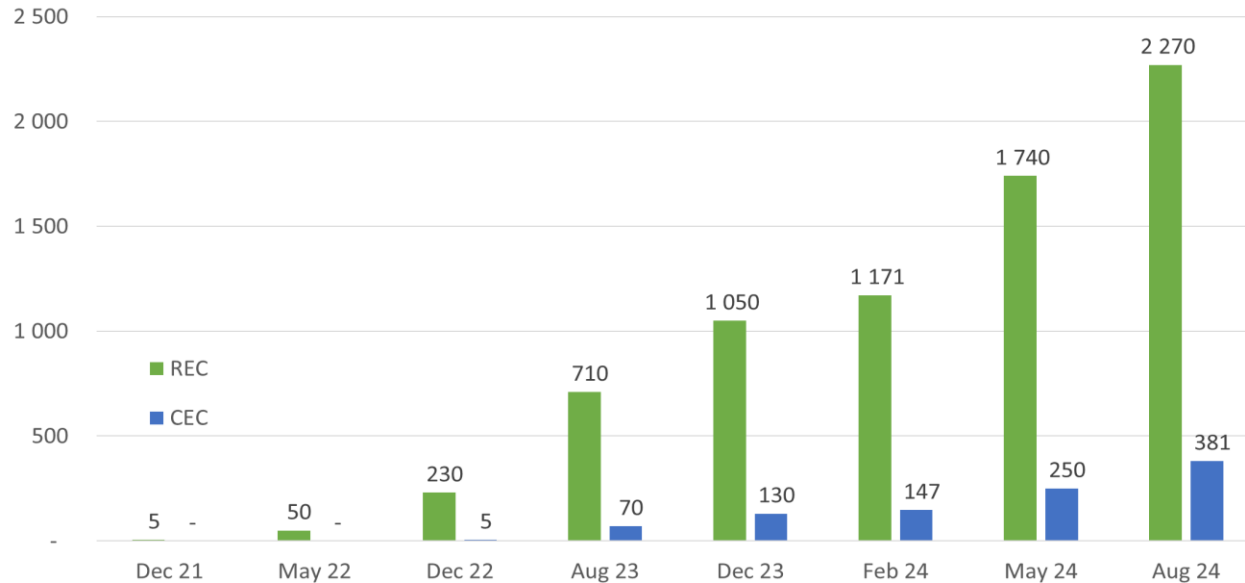


From 2021
**Renewable Energy
Communities**



From April 2022
**Citizen Energy
Communities**

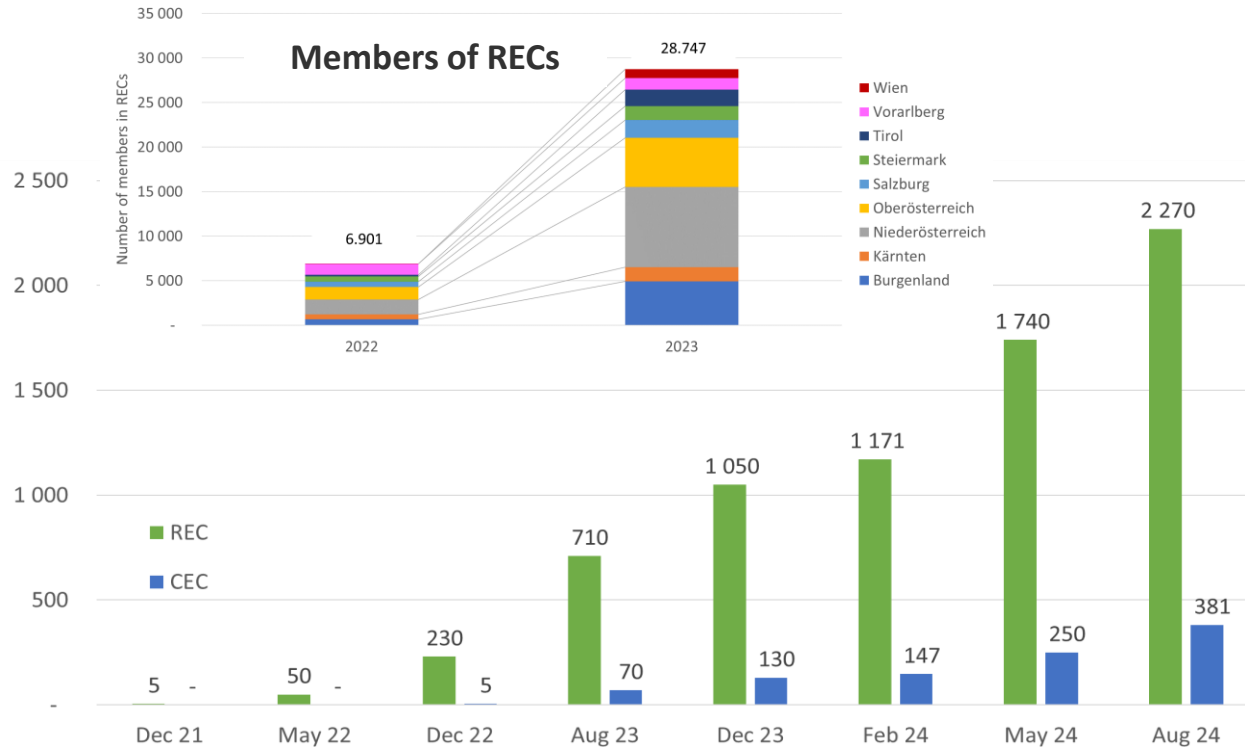
Energy communities in Austria 2021 to 2024



- ▶ Registered energy communities (versus operationally active)
- ▶ **CECs possible all over Austria from October 2023 onwards**
- ▶ **Multiple participation from April 2024**

Source: EDA energiewirtschaftlicher Datenaustausch, registered energy communities

Energy communities in Austria 2021 to 2024



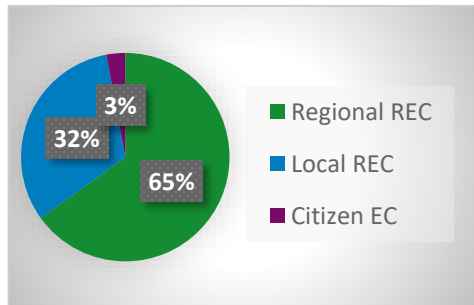
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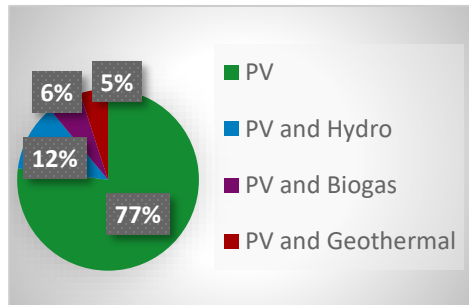
Energy communities in Austria

A study by the Technical University of Vienna

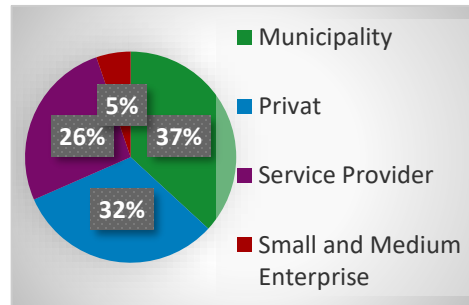
Type of energy community



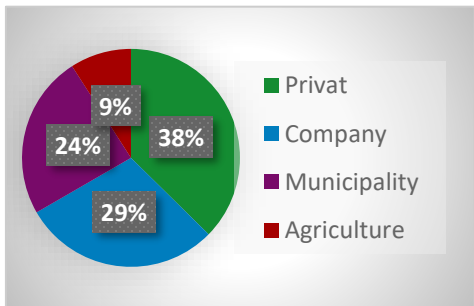
Generation facilities



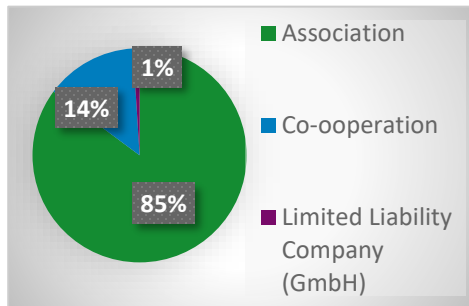
Founders



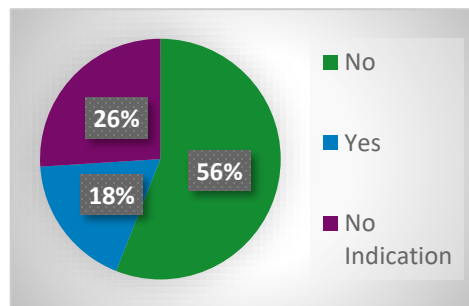
Membership structure



Type of organisation



Integration of storage facilities



Data based on:

- ▶ Survey conducted with 18 ECs
- ▶ Information from the AT data exchange platform (EDA)
- ▶ Reports from funded ECs

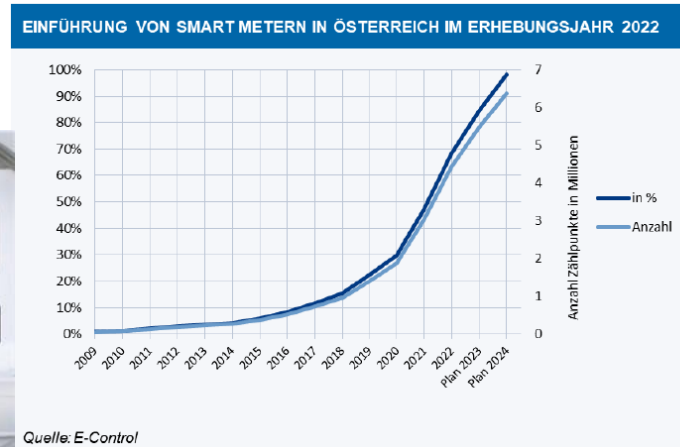
Source: *Energiegemeinschaften – eine Evaluierung bisheriger Erfahrungen und zukünftiger Perspektiven für Österreich*, EEG TU Wien, 2024

Success factors for ECs in Austria 1/3

Framework

- ▶ Robust legal & regulatory framework with incentives & funding scheme

- ▶ Smart meter roll out



Success factors for ECs in Austria 2/3

Coordination Office for Energy Communities



- ▶ **Aims to optimise the framework for energy communities & provide assistance in the establishment of RECs and CECs**
- ▶ **Founded in 2021 by the Federal Ministry for Climate Action, Environment and Energy**
- ▶ **Embedded in the Austrian Climate and Energy Fund**
- ▶ **Link: <https://energiegemeinschaften.gv.at/>**



Quality-assured information

- ✓ Webpage
- ✓ Infographics
- ✓ Explanatory videos
- ✓ Factsheets / guidelines
- ✓ FAQs
- ✓ Sample contracts
- ✓ Best practice examples
- ✓ Hotline

Stakeholder communication

- ✓ Coordinating information exchange with regional organisations
- ✓ Transfer knowledge between national stakeholders such as:
 - Ministries, regulator, associations, interest groups, ECs

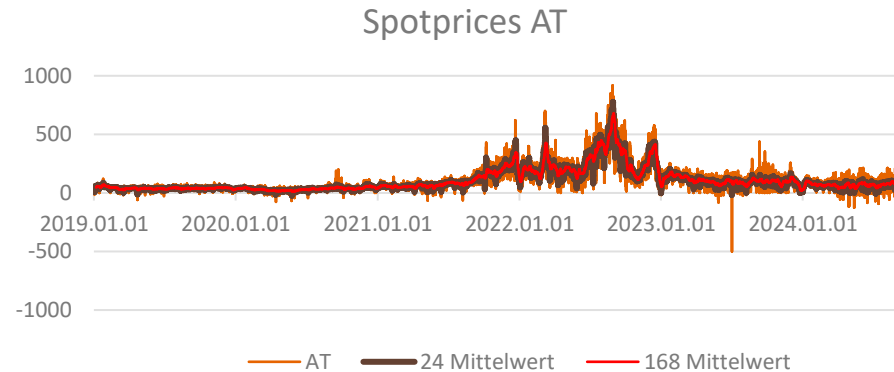
Support for projects

- ✓ Financial support through funding programme (Climate and Energy Fund)
- ✓ Pilot projects in all 9 provinces
- ✓ Identification of challenges and solution-focused support
- ✓ Monitoring/communication of findings

ONE POINT OF CONTACT (knowledge accumulation and distribution)

Success factors for ECs in Austria 3/3

- ▶ Electricity prices & feed-in tariffs



- ▶ Long term price stability, fair prices, local resources, community engagement, etc.
- ▶ Increase in acceptance of large-scale generation plants

Barriers & challenges for energy communities in Austria

- ▶ Data transmission and metering problems



Barriers & challenges for energy communities in Austria

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- ▶ Proximity criteria



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- ▶ Operational control and authority of disposition of generation plants



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- ▶ Storage facilities within energy communities



Barriers & challenges for energy communities in Austria

- ▶ Data transmission and metering problems
- ▶ Proximity criteria
- ▶ Operational control and authority of disposition of generation plants
- ▶ Storage facilities within energy communities
- ▶ Energy communities and conventional electricity suppliers



Review draft of the new Electricity Industry Act in Austria

EIWG



- ▶ **Electricity Industry Act (Eiwog),** first adopted more than 20 years ago and has been subject to numerous amendments since then.
- ▶ **Review draft of the new Electricity Industry Act,** beginning of 2024
- ▶ **Not adopted yet**

310/ME XXVII. GP - Ministerialentwurf - Gesetzestext

1 von 124

Entwurf 2024-01-10

Bundesgesetz, mit dem ein Bundesgesetz zur Regelung der Elektrizitätswirtschaft (Elektrizitätswirtschaftsgesetz – Eiwog) und ein Bundesgesetz zur Definition des Begriffs der Energiearmut für die statistische Erfassung und für die Bestimmung von Zielgruppen für Unterstützungsmaßnahmen (Energiearmut-Definitions-Gesetz – EndG) erlassen werden sowie das Energie-Control-Gesetz geändert wird

Der Nationalrat hat beschlossen:

Inhaltsverzeichnis

- Artikel 1: Bundesgesetz zur Regelung der Elektrizitätswirtschaft (Elektrizitätswirtschaftsgesetz – Eiwog)
- Artikel 2: Bundesgesetz zur Definition des Begriffs der Energiearmut für die statistische Erfassung und für die Bestimmung von Zielgruppen für Unterstützungsmaßnahmen (Energiearmut-Definitions-Gesetz – EndG)
- Artikel 3: Änderung des Energie-Control-Gesetzes

Artikel 1

Bundesgesetz zur Regelung der Elektrizitätswirtschaft (Elektrizitätswirtschaftsgesetz – Eiwog)

Inhaltsverzeichnis

- 1. Teil
Allgemeine Bestimmungen

Review draft of the new Electricity Industry Act in Austria

EIWG

- ▶ **Authorisation** for service providers or ‘caretakers’ to make declarations on behalf members
- ▶ **Operational control and authority of disposition** for surplus suppliers
- ▶ **Umbrella organization for local or regional ECs**: one legal entity for several ECs within the service area of the same grid operator and within the same political district
- ▶ **Non-discrimination** clause for suppliers
- ▶ **Smart meter**, new standard: 15 minutes intervals
- ▶ **Storage facilities**: clearer specifications for use within ECs
- ▶ New model, **peer to peer**:
 - ▶ Only renewable electricity, one-to-one or one-to-many, no supplier obligations
 - ▶ Requirements: DSO has to be informed, Contract between involved parties
- ▶ **Energy poverty law**
- ▶ ...



Contact

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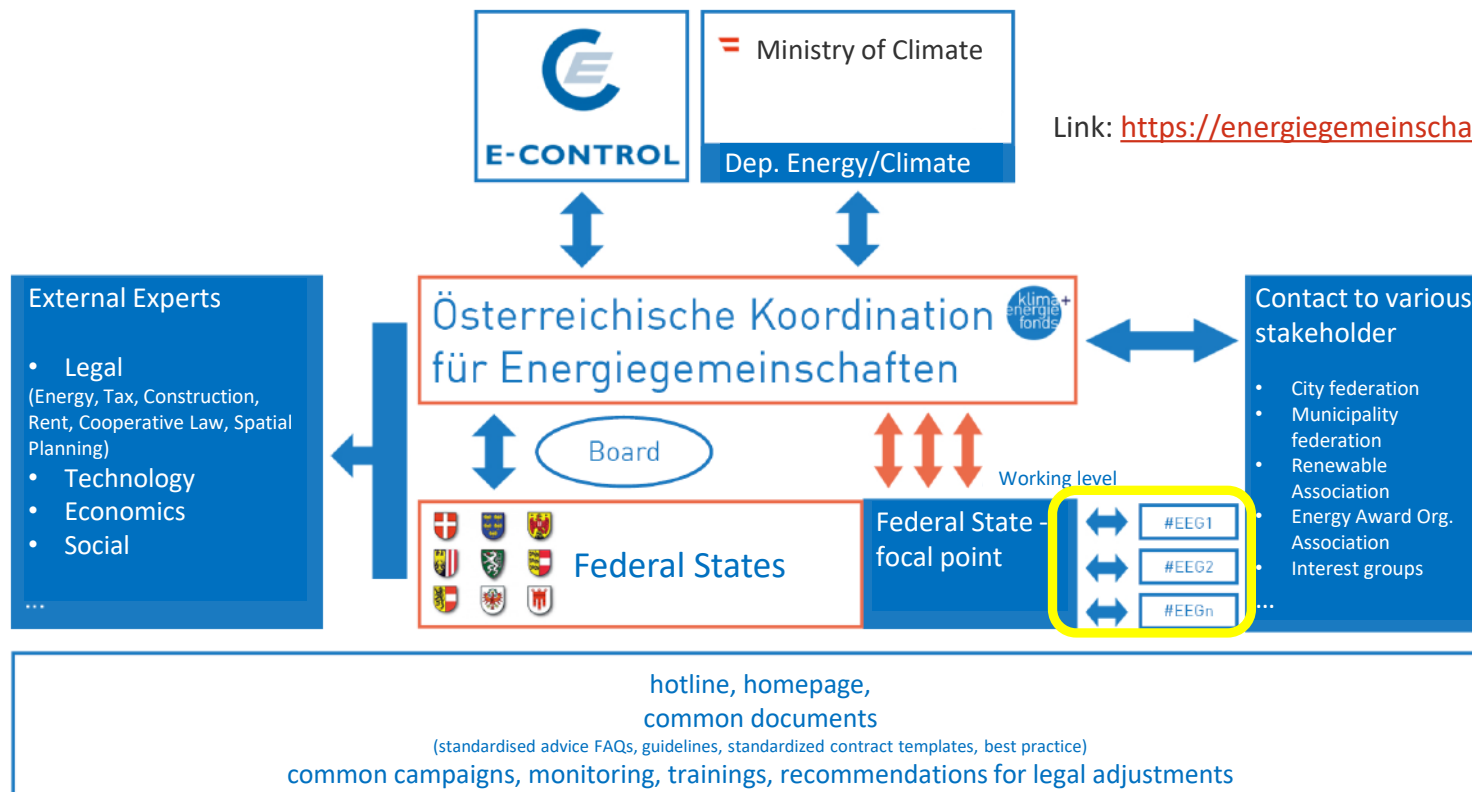
 @at_AEA



In the podcast [Petajoule](#), the experts of the Austrian Energy Agency will be answering questions to the energy future with guests from the energy sector.



We provide solutions for a climate-neutral future.



Austria

EDA: Energy data exchange platform

- EDA is an **IT-infrastructure** that supports **data exchanges between different market participants** (electricity, gas, distribution and transmission etc.), as e.g.:

History

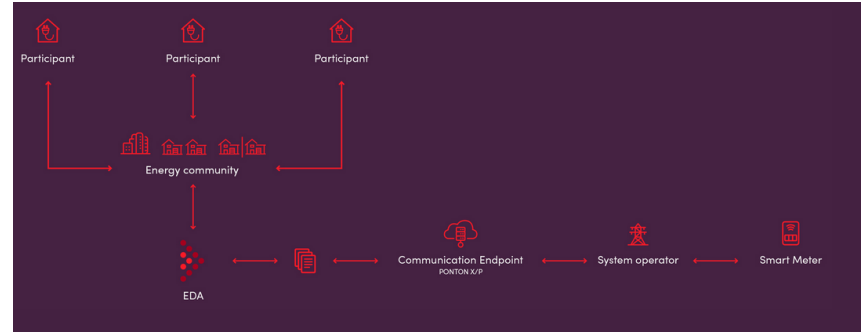
- Idea: a uniform, decentralised, electronic data exchange for the Austrian electricity and gas sector
- started in 2012: the founding members were the nine federal DSOs, four municipal DSOs and the Association of Austrian Electricity Utilities (VÖEW)
 - ARGE EDA, “working group”, association
- 2023: 15 owners & 3 associations in the advisory board
 - legal form: limited liability company (GmbH) since 2020



Austria

EDA: Energy data exchange platform

- Since 2022, data transfer for energy communities has been handled via EDA (step by step)
- Participation for Energy Service Companies and energy communities on the User Portal is **free-of-charge**.



Foundation

- ▶ Establishment of the organizational form (Associations, Cooperative etc.)
- ▶ Registration as market participant on www.ebUtilities.at

Realization

- ▶ Agreement between Energy Community and responsible DSO (Distributed System Operator)
- ▶ **Connection to EDA-Infrastructure**
- ▶ **Electronic data exchange with the DSO via EDA-Infrastructure**

Operation

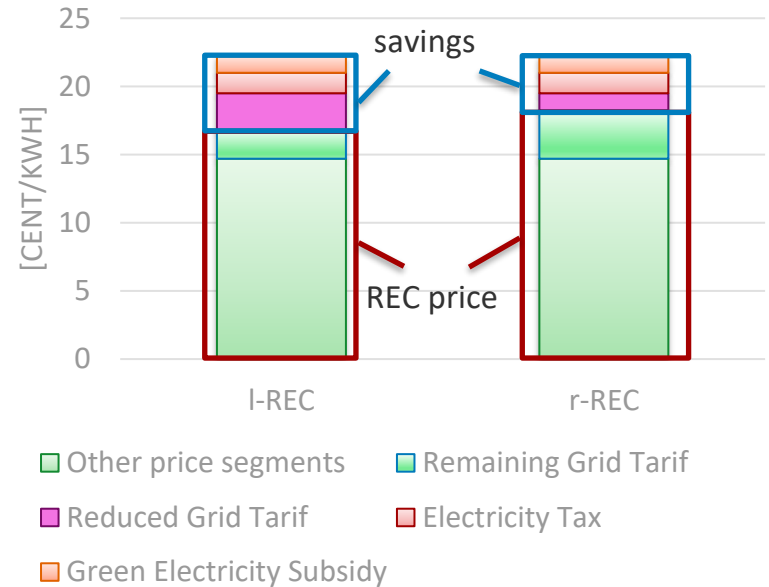
- ▶ Management of participating metering points
- ▶ Receiving and processing of energy data
- ▶ Intra-community billing of the energy data to the individual participants

Implementation in Austria

Financial incentives for RECs in Austria

- ▶ **(setting your own price, long-term price stability)**
- ▶ **Reduction of grid tariffs**
 - ▶ Applies to energy price of grid tariffs
 - ▶ I-REC: 57% for GL 6 & 7
 - ▶ r-REC: 28% for GL 6 & 7 and 64 % for GL 4 & 5
- ▶ **Elimination of Electricity tax** (currently greatly reduced)
 - ▶ ~1,5 cent/kWh (currently 0,1 Cent/kWh)
- ▶ **Elimination of Renewable Subsidy** (currently discontinued)
 - ▶ ~1,2 cent/kWh (currently 0,0 Cent/kWh)

Prices for REC electricity for Household



Grid Levels and Energy Communities

