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Energy Communities: Comparing Initiatives in AT and CZ

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Klara Zinkova
Sophie Hinterholzer

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Abstract

EU member states are currently facing a major task: they must reduce their greenhouse gas emissions. A lot of emissions can be traced back to the energy generation using fossil fuels. According to EU's law the energy generation using RES must be expanded. In order to do so EU has defined plans how to implement these goals. Energy Communities (EC) will be one part of the energy transition. First steps in the right direction of a sustainable energy transition will be the transposition of EU's Directives into national law by all EU member states.

This paper examines the attitude of Austria and the Czech Republic to the ECs and evaluate their success in supporting them. Next, the paper shows the concrete projects which are concerned with ECs. We describe projects (also future projects) of the capital cities Vienna and Prague as well as smaller local projects in villages. We also compare potentials of renewable sources between states and sum up overall comparison of the Czech Republic and Austria in the field of ECs. Finally there is a comparison between the Czech Republic, Austria and all EU member states.

For our research we used law papers, online literature sources and we also received information from interviewing people from the Czech Republic and Austria who are part of an EC. The paper includes the information from the listed sources and also some figures and graphs, which show the development of renewable energy sources in an illustrative way.

We conclude that the situation regarding ECs is different in Czech Republic, Austria and the remaining EU member states. Some states (for example Czech Republic) have not implemented the definition of "Energy Community" into their national law. Other states (for example Austria) have already implemented it, so ECs have a higher potential there and can be developed faster. Overall, ECs are one of the tools to reduce greenhouse gas emissions and achieve our target according to the "Green Deal", to be climate neutral by 2050, and also our target according to the "Fit for 55 package", to reduce greenhouse gas emissions by 55% compared to 1990.

1 Introduction

1.1 Motivation

Our modern society can not live without electricity. We use it every moment for heating and cooling our homes, lighting in buildings, running machines and more. A challenging problem which arises in our everyday energy consumption is that we usually do not know if it is generated by a coal or hydro power plant.

Currently, Europe's energy system is based on fossil fuels that lead to CO₂ emissions which is the driving force behind global warming. Due to the need to reduce greenhouse gas emissions, our society needs to reorganize its sources of primary energy production. A transition to a system based on renewable energy sources must take place. In this regard the European Union has already defined a strict line in form of comprehensive laws. Therefore, the creation of a renewable energy system is of great importance. ECs are one of the tools to realise this project. Some examples of major benefits of ECs are the independence that it brings to countries and individuals, increase of energy production based on renewable energy sources, cheaper energy prices and the increase of efficiency due to omitting wide transmission grids. ECs are a form of decentralised and democratic energy production and distribution [1].

The main idea of ECs is to give customers a possibility to play an active role in the energy system [2]. The customers in ECs can participate in ownership, production and distribution of energy. The term of an EC can be described as a group of citizens, municipalities, Small and Mid-sized Enterprises (SMEs) who build up or buy together some energy source for their local consumption.

A participation in an EC must be open and voluntary, it is said in the EU's directives. It follows that people must have a spirit of initiative, they must be proactive. Citizens or other subjects who join an EC have to decide on their own which kind of energy source they will support by taking advantage of certain EC-members. If states, regions or cities want more local energy sources and decentralised energy production, they should keep the public informed about possibilities how to do so: set up an EC, choose an appropriate energy source and get financial support if necessary.

In general we can find ECs which are founded by housing associations or by citizens who live in the same district. These ECs often use the capacity of the roof for photovoltaic. Bigger ECs can be cities or regions in states. They can run wind power plants on a vacant land or build photovoltaic panels on roofs of public buildings, for example on hospitals, schools or public offices [3].

1.2 Research questions

What is an EC?

What is the role of people for creating a stable and sustainable EC?

What is the legislative basis for creating an EC?

How could an EC look like?

How to become a participant of an EC?

Is an EC between different EU countries possible? (e.g. solar power from Spain, wind power from the northern EU countries...)

2 Methodology

In this seminar paper we used literature sources, law papers and information that we received from interviewing people from the Czech Republic and Austria who are part of an EC.

3 CZ and AT situation

3.1 CZ situation

3.1.1 Opportunities

At the end of 2021 there has been published a study on the potential of community energy in the Czech Republic. There are described options of installed capacity in 2040 from PVs, wind power plants, biogas stations, biomass burning sources and battery storage. Of course the installed capacity depends on the development of community energy.

In ECs will be probably the most common energy source the PV, because it is possible to install photovoltaic panels on roofs. It is not necessary to find a free estate near a city, the unused roofs in cities can be used effectively for a good purpose. Now in Czech Republic there is installed 2054 MW from PV (not just PV on roofs). According to the best scenario the potential is 4091 MW. This amount of photovoltaic panels can generate approximately 4450 GWh/year.

The second source, which is supposed to be owned by the municipal ECs, is energy generation by wind power plants. An installation of the wind power plants bring some limitations. The power plants must be built in the appropriate geographical conditions, in places where it is windy and also in a definite distance from houses. It also brings higher investment costs. Nowadays there is 300 MW of installed capacity in the Czech Republic and the potential is 3306 MW which can generate 8265 GWh/year [4].

If we take the potential of PV panels and wind power plants together it is possible to cover almost one-eighth of the total current electricity consumption in the Czech Republic [5].

The picture below shows what types of renewable sources Czech Republic produces electricity from.

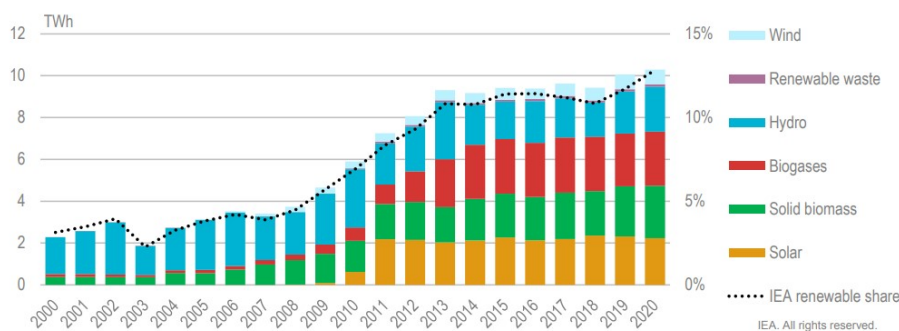


Figure 1: Renewable energy in electricity generation in Czech Republic 2000-2020 [6]

3.1.2 Legislation

The legislation about ECs does not exist in the Czech Republic yet. According to the EU's Directives and Regulations, which are part of The Clean Energy Package, the Czech Republic should have integrated the definition of EC into national law already. Similarly national legislation could decide which type of legal entity will be available for communities. These integrations should have been taken over into Czech's law between the years 2019 to 2021. Now it is 2022 and in Czech Republic a new energy law is in the process. The government published a time line with important dates about new energy law publications regarding the definition of EC. In the time line it is written that the proposal of the New Energy Act will be put forward to the Government by the end of this year 2022. The parliament will debate it during the next year 2023. This means that the New Energy Act can be valid in 2024 at the earliest [7].

The situation is complicated for the development of the ECs. Non-existence of the legislation about ECs prevents the formation and progress of community and decentralized energy in the Czech Republic. The members of EC (as it is defined in the EU's legislation) should behave like customers but also sell

electricity to the grid. This behaving is not possible in accordance with the current legislative conditions [5].

A mention about community energy can we find also in The Czech Republic's plan in the field of energy and climate or in the donation program called KOMUNERG, which should start in 2023. The program KOMUNERG is under the Modernization fund and it will support the open ECs. In The Czech Republic's plan in the field of energy and climate counts on ECs as a way how to achieve the goals of increasing electricity production from renewable sources [4].

Given the above it is clear that the development of the community energy depends primarily on the future legislative conditions and on the future financial support.

3.1.3 Projects

Kněžice - energy self-sufficient village - 2006

A copybook example of the energy self-sufficient is a village Kněžice. Kněžice is located in central Bohemia and has circa 500 inhabitants. Kněžice has generated from own sources enough electricity and heat for own consumption since 2006.

Kněžice uses a biogas power plant with three large tanks and two biomass combustion boilers. The biogas plant has an output of 330 kW and continuously produces electricity and heat. The generated electricity is passed through the local distribution company ČEZ distribuce and through this network it is taken by households and companies. In total, the net electricity supply from the biogas plant to the grid is approximately 2200 MWh / year. Biomass combustion boilers have a total heat output of 1200 kW and are only in operation if needed during the year. Up to 95 per cents of houses in Kněžice are connected to the heat distribution system [8].

Kněžice built a biogas plant and biomass boilers thanks to the proactivity of the mayor and the residents. The project was financially supported by the European Regional Development Fund (ERDF) and the State Environmental Fund of the Czech Republic. In the future, Kněžice plans to build a local distribution network so that energy can be sold directly to consumers and they also plan to place PV on the roofs of houses [9].

Mikolajice

Another example of a municipality that has elements of an EC is the municipality of Mikolajice. The municipality together with the University Center for Energy Efficient CTU will have built a heating system with a congregational boiler. The boiler provides electricity for the municipal office, the fire station and the grocery store. In addition to the boiler, photovoltaic panels are located on the roof and batteries are installed in the building [10].

Smart district Chytré Líchy

Near the second largest city in the Czech Republic, Brno, there is a project to build a smart, ecological and sustainable district called Chytré Líchy. The vision is that the buildings here will be economical and they will cover their own consumption from renewable sources. Photovoltaic panels will be placed on the roofs [11]. The final vision is a real virtual power plant in which citizens will be able to buy a share. In addition to normal operation, for example, peer-to-peer trading of produced electricity or the acquisition of a large electricity storage facility and the possibility to act as a provider of flexibility are potentially possible. This project should start building as early as 2023 [12].

Prague and ECs

As there is still no legislation about the ECs in the Czech Republic, the capital city of Prague has decided to support community energy at least a little and give citizens the opportunity to participate in it. Prague has established a Community for Renewable Energy Sources.

There are several ways to join the Prague Renewable EC. Citizens can have a proposal for the placement

of photovoltaic panels on a house or apartment building, and those who cannot have photovoltaic on their homes will have the opportunity to be a co-investor in photovoltaic in another house and then take energy from this source. This will give citizens several benefits: of course, after installing their own photovoltaic panels, they will save money on energy costs, but in addition, the organization will reduce the administration associated with the construction and operation of photovoltaic, offer them regular inspections and efficiency checks.

The main goal of organization is to actively involve citizens in energy sharing. Each participant will have the opportunity to use energy from their own production or share it with others. *“It will literally be possible to transfer energy / at the agreed price / according to current conditions for efficient use in other consumption points.”* The organization also installs photovoltaic panels on city buildings [13].

The goals of this organization are based on the Climate Plan for Prague by 2030. According to this plan, Prague wants to reduce CO₂ emissions by 60 % and add 2.3 TWh of electricity per year from new zero-emission and low-emission plants [14].

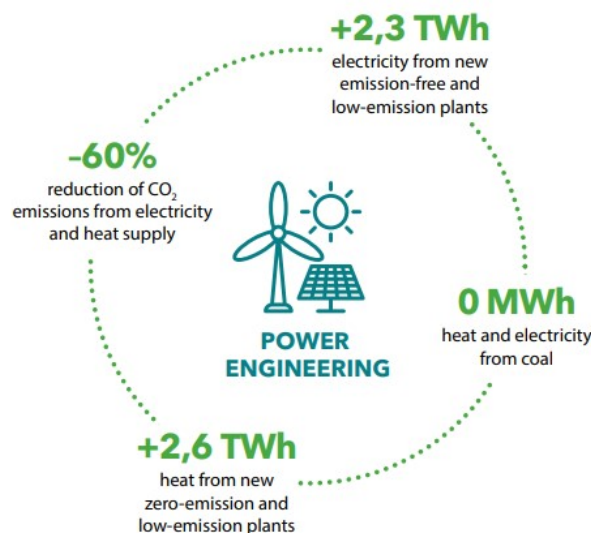


Figure 2: Main changes brought to the city by the Climate Plan by 2030 [14]

3.2 AT situation

3.2.1 Opportunities

Austria has high potentials in the expansion of renewable electricity generation but it requires improved framework conditions. In *Figure 1* you can see the evaluation of the existing framework conditions and the progress made so far in the expansion of electricity generation from hydro power, wind power, PV buildings, PV open space and biomass in the individual federal states of Austria. Taking into account the realizable, technical and economic potential biomass has attractive conditions in every federal state. Hydropower plants have attractive conditions in Styria and expandable framework conditions in Salzburg, Tyrol, Carinthia, Vorarlberg, lower and upper Austria. Wind power has expandable framework conditions in Burgenland and lower Austria. In Vorarlberg, Tyrol, Salzburg, upper Austria and Carinthia are obstructive framework conditions due to the mountains of the Alps that cover those areas. PV on buildings have high potentials in lower and upper Austria, Vorarlberg and Styria. In all the other federal states there are expandable framework conditions. With regard to PV on open space, all federal states show obstructive framework conditions except Styria [15].

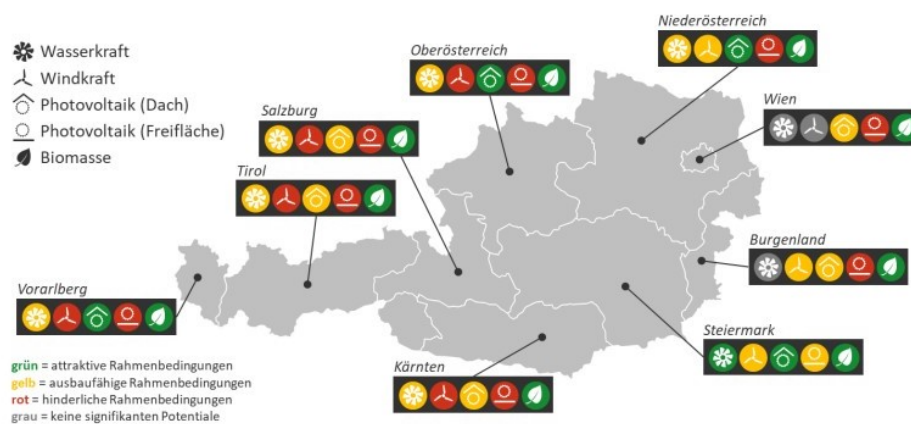


Figure 3: Evaluation of framework conditions for the expansion of renewable electricity generation in the individual federal states of Austria [15]

3.2.2 Legislation

First of all the EAG [16], ElWOG [17], Energieeffizienzgesetz, EU-Strombinnenmarkt-RL, Umwelt-Anlagenrecht are important laws for the energy sector in Austria [18].

The “Erneuerbaren Ausbau Gesetz“ [16] allows to create ECs in Austria. In addition, the EAG [16] represents the necessary implementation of EUs “Clean Energy Package“, in more detail the Electricity Directive EU 2019/944 and Renewables Directive EU 2018/2001 into national law. According to the ElWOG § 16 b, c [17] there are two types of ECs:

1. Erneuerbare-Energie-Gemeinschaften (EEG):

An EEG is allowed to produce, store, use and sell energy in form of electricity, warmth or gas produced from renewable energy sources. They use facilities of the network operator, like the electricity grid, but they must always be located within the concession area of a single network operator. EEGs are limited to the “Nahbereich“ defined by the grid levels in the power grid. The participants in a local EEG are connected to each other within network levels 6 and 7 (low-voltage network). If network levels 4 (only the medium-voltage busbar in the substation) and 5 are also included, this is referred to as “regional EEG“.

Members or shareholders of EEGs can be private or legal persons. For example: municipalities, local authorities or SMEs. They need to be located in the “Nahbereich“ of the generating plant(s). A lot is possible as an organizational form for EEGs, from associations to corporations, but the focus is on non-profit status. The main purpose of EEGs is not financial gain, this must be anchored in the statutes

or result from the organizational form of the EC [17].

2. Bürgerenergiegemeinschaften (BEG):

Similar regulations apply to BEGs as to EEGs. In contrast to the EEG, the BEG may only generate, store, consume and sell electrical energy. It is not limited to renewable sources and can extend over the concession areas of several network operators throughout Austria. In BEGs the members or shareholders can be private or legal persons and it also applies that the focus should not be on making a profit. As with the EEGs, this must be anchored in the statutes or result from the organizational form of the EC [17].

3.2.3 Projects

Vienna – Viertel Zwei (project duration: 2017 - open)

The Urban Pioneers Community is a joint innovation and research project by “Wien Energie“, the largest regional energy provider in Austria, and the real estate developer “Value On“, “Vienna Contracting“ and partners from research and industry.

In this long-term project, the focus is on an innovative approach, in which the expertise of experts from various organizations involved is taken into account as well as the knowledge and needs of the participating “pioneers“.

Various experimental electricity tariffs were developed and tested in the project. In addition to tariffs that depend on the time of use or the wholesale market price, this also includes consumption-independent tariffs that enable the use of solar energy. For this purpose, a local PV system was integrated into the project and its production divided proportionately among all customers with this tariff. Transactions made are stored using blockchain-technology to make them transparent and traceable.

The user interface forms the interface between all those involved and enables access to various information, such as consumption data in real time. Smart meters (electronic electricity meters) are a pre-condition for modern electricity tariff models due to real-time measurements. In conclusion, it can be said that during the project implementation it became clear that the existing legal framework often limits the possibilities for innovative developments [19].

Upper Austria – LEC Steyr (project duration: 01.04.2019 - 31.03.2022)

The demonstration project “LEC Steyr - development and testing of financing and business models of a local EC in the municipality of Steyr“ is funded as part of the Smart Cities Demo funding program by the climate and energy fund. The project aims to develop operator, financing and business models for the operation of a renewable EC in the industrial city of Steyr and to demonstrate them in real operation. The concept is being developed and subsequently tested for the following application areas: Stadtgut Steyr: industrial and commercial parks, municipal buildings (kindergarden, retirement homes), and private households.

Based on the known legal framework, the needs, requirements and expectations of the stakeholders are worked out and suitable models for an EC are developed together with them. The operation of the EC is intended to ensure that there is an economic advantage for all members involved and to help advance the expansion of renewables in Steyr. As part of the project, it is therefore planned to set up at least 2,000 kWp of PV in the city and to recruit at least ten members for the EC.

The evaluation of the developed tariff and operating models for the ECs is carried out using techno-economic simulation models. A monitoring concept is being developed for real operation, which will enable accompanying monitoring of the operation of the ECs [19].

4 Comparison

4.1 CZ vs. AT

When comparing the ECs in the Czech Republic and Austria, huge differences can be seen in the implementation of the “Winter energy package“ into national law.

In Austria, the EC is directly defined in the “Erneuerbaren Ausbau Gesetz“ (EAG) [16]. The definition of an EC allows Austrian citizens to sell their own energy on the electricity market. In addition, communities can enter into electricity generation contracts or create structures to generate, supply and store electricity. Austria sees great potential in community energy and this is one of the ways in which they can achieve their goal: to produce all energy from renewable sources by 2030.

The situation in the Czech Republic is not affable for the ECs. The Czech government has not implemented the definition of ECs in its legislation yet, so there are not many opportunities for the development of the community energy. For the future, the key factor for the ECs is legislative in each state. That is the reason why it can be said that there are much more affable conditions in the establishment and operation of ECs in Austria.

In terms of the potential of individual renewable sources in Austria and the Czech Republic, both countries have the potential to increase the number of solar panels, energy sources using biomass and wind power plants. How the potential will be used will depend mainly in the case of the Czech Republic on the development of national legislation and further according to set goals according to the “National Energy and Climate Plans“(NECPs), which analyse plans of states regarding RES.

The graph below shows the goals of several states for 2030. We see that of the evaluated states, the Czech Republic and Austria are at opposite ends of the graph and the Austrian goals are higher than the Czech goals [20].

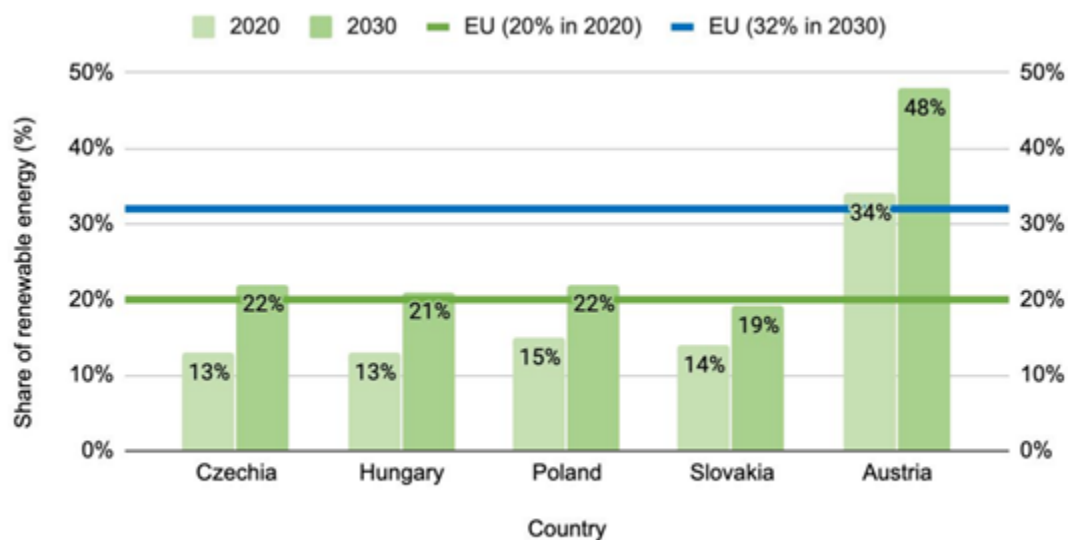


Figure 4: Share of renewables in 2020 and 2030 [20]

4.2 Comparison between CZ, AT and the whole EU

First, it is important to know that not all EU member states have transposed the definition according to the EU Renewable Energy Directive and the Internal Electricity Market Directive into national law. Pioneers of the clearly defined legal framework of ECs are Sweden, Denmark, Ireland, France, Belgium and Italy. Unfortunately, as you can see in *Figure 5* below, Czech Republic, Hungary, Slovenia have not yet established any definition of EC in their national law yet [21].

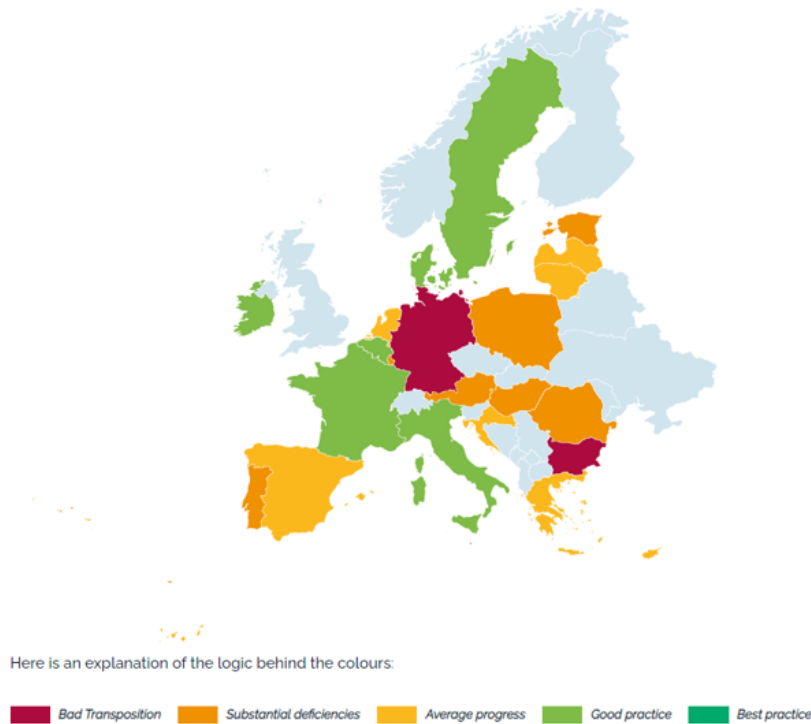


Figure 5: Progress of the transposition of EC definitions in the European Member States [21]

In order to compare potentials of different EU countries, let us take a closer look at the energy production from RES in these countries. Countries that are already focusing on the energy generation from RES can use this as an advantage in the expansion of ECs. Because the expansion of RES is a pre-condition for the expansion of EC. We intentionally did not use primary energy production here, because in this comparison we want to consider the potential of the individual EU countries in terms of their RES resources, which they can use for future ECs.

As you can see in *Figure 6* Norway, Iceland, Albania, Sweden, Austria, Denmark, Switzerland, Portugal etc. already produce a large amount of their electricity from RES compared to other European countries [22].

Furthermore, in order to be able to draw complete conclusions about the independence or dependence of the countries from large electricity importing countries, the consideration of the electricity production from renewables of the desired countries is not sufficient. It is also of great importance to be aware of how much electricity the respective countries have to import in order to cover their overall electricity consumption. Because only then can the current situation of the countries be assessed with regard to their progress in the expansion of RES related to their overall electricity consumption need.

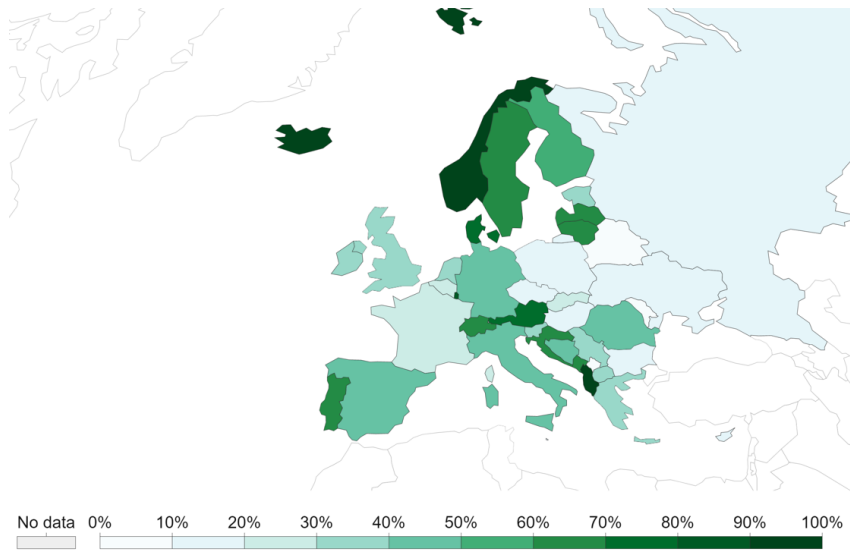


Figure 6: Share of electricity production from renewables, 2021 [22]

5 Interview outcomes

5.1 CZ

The interview was conducted with a colleague from work. The colleague is living in Prague and she decided to apply for a subsidy for photovoltaic panels on roof of block of flats with the neighbours. The administration connected with this act it according to her really complicated and the citizens must spend long time with the arrangement of PV. She said, the whole process needs to be simplified, otherwise more houses will not buy their own photovoltaic panels and through it make electricity market more decentralised.

5.2 AT

I interviewed someone who is already part of an EC per E-Mail. They were asked questions about joining an EC and if it was difficult to become a member. The questions and answers in detail can be viewed in the *Appendix* [23].

The company interviewed is a brewery based in Lower Austria. They decided to join an EC because, as a brewery, they need a lot of electricity on brewing days, which they wanted to produce themselves ecologically and independently. Because they don't brew often, much of the electricity is left over that they can now sell and distribute through the EC. They also wanted to support the local energy service provider and young Startup "eFriends". This company made the brewery aware of the possibility of participating in an EC through a personal conversation and involved them in an EC by implementing the "eFriends" technology.

The brewery in question has a solar system, so in this case the installation of the "eFriends" technology and the process of becoming part of the EC took them only a few days. With this technology, the user can use an App to choose the seller/producer, of the purchased electricity by himself/herself. The seller/producer can offer his individual price.

Looking back, the brewery feels that joining the EC in this form was by no means difficult [23].

6 Future goals in the field of RES

Why Energy Community?

There are many reasons why countries should invest into ECs and develop them. The economic benefits are for example: Lower energy bills, energy independence or creating local jobs for the citizens. Social benefits are local cohesion, public acceptance and trust or in general energy democracy. Last but not least an example for an environmental benefit is the reduction of greenhouse gas emissions (CO₂) [24].

Goals of EU states

In 2019 the EU established the European Green Deal. The Green Deal is a main strategy how to achieve climate neutrality until 2050. To do so, current levels of greenhouse gas emissions need to be significantly reduced in the coming decades. As a partial step towards climate neutrality, the EU has increased its climate ambitions by 2030 and is committed to reduce emissions by at least 55% by 2030 (compared to 1990). The package called “Fit for 55” was established and aims to reduce greenhouse gas emissions (GHG) by at least 55% by 2030.

According to the report [25]: *“To deliver a climate neutral economy we will need to make greater use of today’s wind energy potential. The European Commission’s scenarios see wind becoming the main electricity source for the European power system shortly after 2025 – by 2030 it will cover 25% of all electricity needs.”* This situation shows the graph below.

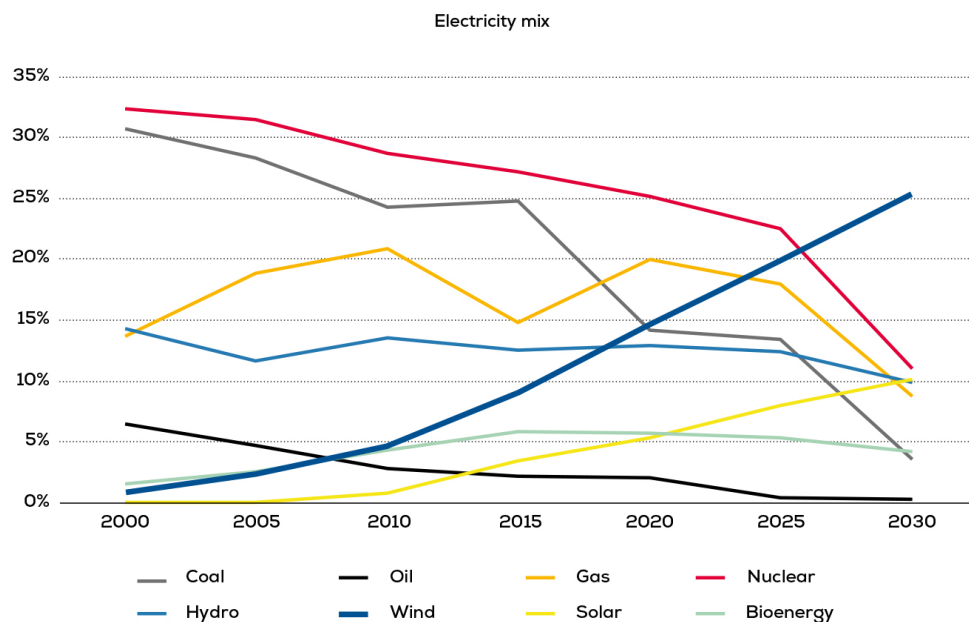


Figure 7: EU’s electricity mix 2000-2030 [25]

The following graph shows EU's electricity mix in 2050 predicted by *ETIP Wind*.

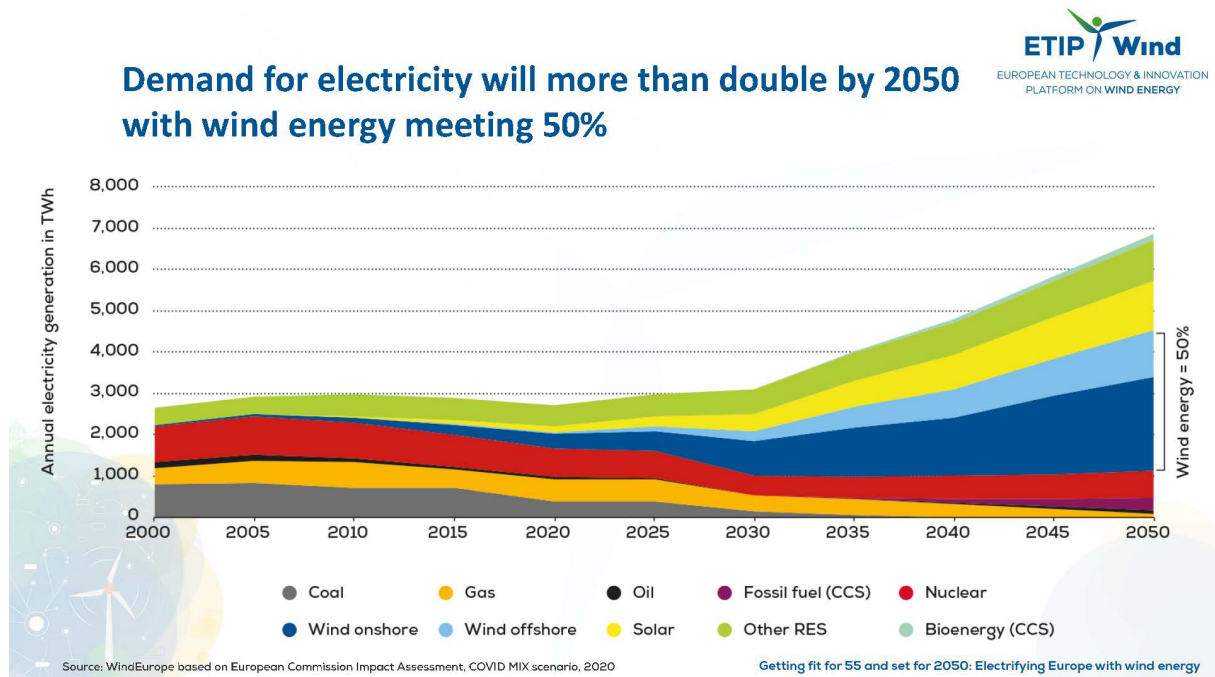


Figure 8: EU's electricity mix in 2050 [25]

7 Conclusion/Results

Now we want to summarize our main conclusion of our Seminar-Paper in the following chapter.

According to our interview outcomes it can be stated that it is not very difficult to join an EC in Austria. There are different ways of joining an EC. It is probably easiest if you leave the bureaucratic work and the installation of the technical requirements and thus also the guarantee of the technical connection with the other EC members to an energy service provider who is familiar with the matter. But if someone is really interested in the EC-topic it is also possible to set up an EC by oneself. In Czech Republic the legislative framework for ECs is not clearly defined yet and it is very difficult to sell electricity generated e.g. by your own PV-panels on the roof to the grid.

It would be very difficult to set up ECs between several EU member states, since the technical requirements for large-scale ECs are not yet developed well enough. In addition, there are several different network operators in different countries, which would have to be coordinated extremely well in order to be able to guarantee a regulated energy distribution. We found out, at least for Austria, that you always have to have a contract with the network operator. If there were several of them, the bureaucracy would be unbearable, especially in the future when many citizens decide to become members of an EC. In Austria, the EAG [16] must be further adapted in order to follow the requirements of the framework conditions for the energy transition.

The transnational distribution of electricity from renewable sources should be traded in the traditional way, but in general the expansion of renewable energy generation must be pushed more, in interests of the energy transition.

Due to other types of electricity generation, for example nuclear power plants, some European countries are not focusing enough on expanding renewable energy sources even when EU-law provides it. In the Czech Republic, therefore, not all labor is invested into the implementation of the definition of ECs in national law and the development of renewable energy sources.

Based on a conversation with an “eFriends” employee from Austria, we found out that right now most projects in the field of energy communities are prestigious projects and not so many people create or join an EEG for reasons of sustainable development. In addition, it is difficult to expand the idea of ECs because conventional energy providers have too much influence on politics and other decision makers. So that is why ECs are not so common in Austria yet. For the future, we hope that large concerns will adapt their behaviour and not hinder good ideas/technologies to ensure sustainability in the energy sector [26].

In conclusion of our Seminar Paper, we would say that the idea of ECs pursues the development of an inclusive local community that produces sustainable electricity that they can independently generate and sell to each other as a community. Alongside other opportunities for sustainable energy production and distribution, ECs will be an important part of the energy transition.

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Appendix

Interview - Questions and Answers in *Original Language*

1. Warum haben Sie sich entschieden Teil einer Energiegemeinschaft zu werden?

Antwort: Vor ein paar Jahren haben uns 2 Leute des eFriends Teams besucht und uns über ihr junges innovatives Startup 2 Ortschaften weiter von uns erzählt. Wir dachten, solche Menschen möchten wir unterstützen und sind beigetreten, damals noch mit einer 5 kWp PV Anlage. Als Bierbrauerei benötigen wir an Brautagen sehr viel Strom, wir wollten diesen ökologisch und unabhängig selbst produzieren. Um den Strombedarf an Brautagen komplett selbst zu decken, erweiterten wir heuer unsere PV Anlage auf 30 kWp. Wenn wir nicht brauen (also an den meisten Tagen), bleibt ein Großteil des Stroms einfach übrig. Diesen können wir nun mit anderen eFriends teilen. Diese Erweiterung wurde durch ein Beteiligungsprojekt mit den eFriends teilfinanziert.

2. Was war der erste Schritt? War es eine E-Mail oder ein Anruf?

Antwort: persönliche Kontaktaufnahme von Seiten der eFriends.

3. Wie lange hat es gedauert bis Sie Teil der Energiegemeinschaft waren?

Antwort: Ein paar Tage? Sie mussten erst die Technik bei uns installieren, wir bekamen einen App-Zugang usw.

4. Wer ist für die Verteilung des Stroms verantwortlich?

Antwort: Jeder Benutzer wählt selbst die Erzeuger/Quellen. Jeder Erzeuger legt seinen Preis selbst fest. Passiert alles über die eFriends App. Der Netzbetreiber ist Netz NÖ (EVN).

5. War es schwierig der Energiegemeinschaft beizutreten?

Antwort: Nein, nicht über die eFriends in der Form, in der wir es praktizieren.

6. Was sollte die Regierung ändern, um den Zugang zu einer Energiegemeinschaft zu erleichtern?

Antwort: Da kenne ich mich zu wenig aus, was die aktuelle Lage und Bedingungen sind.