

Austria's Integrated Energy and Climate Plan, Mission 2030, *Langfriststrategie 2050*, and *Regierungsprogramm 2020-2024*: A critical analysis

Azadeh Badiejjaryani, Beatrix Hausner, Samira Karner, David Horvath (ÖGUT), 2022. Analysis in the context of the Austrian work participation "IEA User-Centred Energy Systems 'Empowering all': Gender Equality for the Energy Transition".

I. Introduction

Within the international scene, Austria is renowned for its innovative energy solutions and has been praised for its aspiration and dedication to addressing environmental concerns. Austria envisions becoming a global innovation leader in energy and has set highly ambitious goals for itself to meet (*ENERGY Research and Innovation Strategy*, 2017). Unlike most countries aiming to reach complete decarbonization in the energy sector by 2050, the current legislation of the federal government of Austria is targeting 2040 to pursue net zero in the energy sector and the whole economic system. Simultaneously, Austria is committed to implementing the Sustainable Development Goals (SDGs), especially gender equality, in its national and international policies and legislations. Therefore, such goals must be the underlying basis of the Austrian climate and energy strategies and action plans (*Austria and the 2030 Agenda*, 2020).

Domestically, Austria has established multiple initiatives and fundings to raise awareness about gender inequality in the energy transition, collects data to identify the gaps and funds studies to support women's participation in the energy sector (e.g., FEMtech¹ or Laura Bassi Network²). Moreover, Austria is an active member in international initiatives and programs, particularly under the International Energy Agency, expanding its network to exchange practices and effective policies and striving for equality in energy transitions and closing the gender gap (e.g. the Equality in Energy Transitions Initiative³).

In this context and as part of the Gender and Energy Task, we conduct a critical analysis of the following Austrian policies and plans through an energy user's perspective reflecting on the incorporation of social/gender justice:

➤ *The Austrian Energy and Climate Plan or the National Energy and Climate Plan 2021-2030 (NECP)*

Published in 2019 by the Federal Ministry Republic of Austria, Sustainability and Tourism, this document is a ten-year integrated plan at the European Union level aiming to provide medium- and long-term solutions and frameworks for a just and equitable energy transition in Austria in line with Paris Agreement goals. The Austrian

¹ [Talente Nützen. Gleiche Chancen. | FEMtech](#)

² [Laura Bassi 4.0 Netzwerk - Digitalisierung und Chancengerechtigkeit | FFG](#)

³ [Home - Equality in Energy Transitions \(equality-energytransitions.org\)](#)

NECP focuses on 5 dimensions: a) decarbonization, b) energy efficiency, c) security of energy supply, d) internal energy market, and e) research, innovation and competitiveness.

➤ *Regierungsprogramm 2020-2024*

This program was published in 2020 by the Bundeskanzleramt Austria and was written by Die neue Volkspartei Die Grünen – Die Grüne Alternative. The chapter most interesting to us was “climate change, infrastructure, environment & agriculture.” Sub-chapters are climate change & energy, traffic & infrastructure, environment & nature protection (conservation), agriculture, animal welfare & countryside and tourism, as well as the sub-chapter of poverty reduction. In this document, the Austrian Federal Government re-emphasizes its responsibility to take the necessary steps and set the course to meet this challenge at all levels and to fulfill the goals of the Paris Climate Agreement.

➤ *#mission2030*

The Austrian Federal Ministries for Sustainability and Tourism and for Transport, Innovation and Technology presented the “#mission2030” in May 2018. This document serves as the national climate and energy strategy, which includes decarbonization recommendations and targets until 2030. In December 2018, the National Energy and Climate Plan (NECP) was submitted to the European Commission based on the #mission2030. After incorporating the Commission's comments and conducting a public consultation, the NECP was finalized by the end of 2019.

➤ *Long-Term Strategy 2050*

A Long Term Strategy (LTS) was prepared by the Federal Ministry of Sustainability and Tourism and presented in December 2019. The vision described therein is a climate-neutral Austria in 2050, with the ambitious goals of achieving this climate neutrality a) without nuclear energy and b) with as few carbon capture and storage (CCS) technologies as possible.

The rest of this report is organized as follows: Section II and III highlight the two major fields that Austria is concerned with, namely, research, innovation and technology, and sustainable economy. Section IV draws on our findings regarding social/gender justice and the invisibilities present at the documents. Subsequently, section V provides a conclusion.

II. Research, Innovation and Technology

All the mentioned Austrian policies and plans are focused on research, innovation and technology as the three pillars enabling the imagined net zero future. Their role in the #mission2030 is described as a part of the overall goals (“Was uns wichtig ist”) and tasks. In the LTS document, science and innovation are positioned in connection with almost all the challenges and strategies listed for various sectors such as renewable energy, energy efficiency, decarbonization, mobility, industry, and building. The NECP and #mission2030 documents also put an emphasis on research and innovation - recommending a set of

general actions to increase funding, develop education services, raise awareness and attract young researchers to energy-related sectors.

Austria identifies technical and “scientific” fields as the primary research themes in need of funding and resources. The listed thematic areas are energy systems and networks, buildings and urban systems, industrial energy systems, transportation and mobility systems, and conversion and storage technologies.

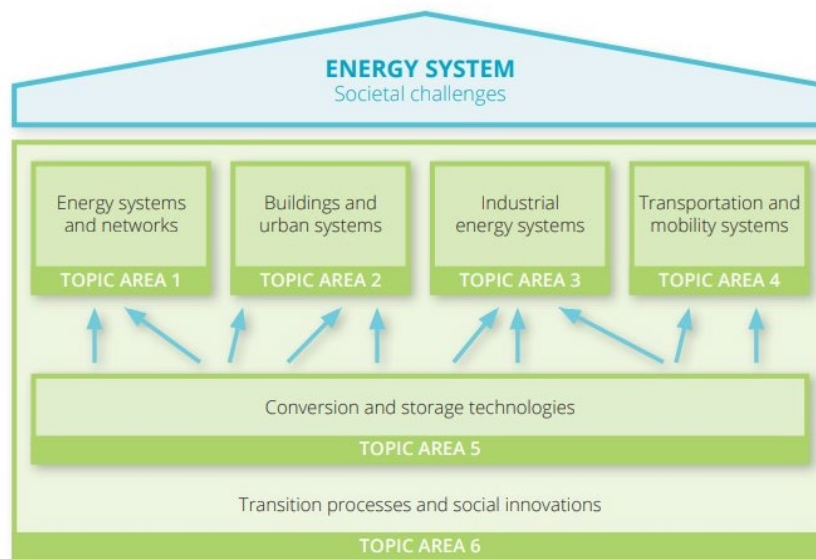


Fig 1: “Thematic areas in energy research and innovation in Austria”
(German figure: NECP, p.103; English figure: *ENERGY Research and Innovation Strategy for Austria*, p.5)

Austria recognizes that the five mentioned topics are embedded within the transition processes (see fig 1) and social innovation field which is dependent on excellent technology, economic competitiveness, and cultural, social and legal environment (*ENERGY Research and Innovation Strategy for Austria*, 2017). It seems social sciences are not considered a part of the “scientific” fields and their importance is only discussed in relation to socio-technical designs and socio-economic systems, narrowed down to technology acceptance. Therefore, it is unclear how other cultural, social, and legal dimensions of energy transitions are taken into consideration. Given that Austria is striving to become a pioneer in energy innovation globally, research and technology are paramount means to accelerate Austria’s process of achieving net zero and increasing its competitiveness in the international market. Parallely, Austria puts “energy research and innovation at the heart of solving societal challenges” (NECP, p. 51). Yet, what those challenges are, and how research on these thematic areas interacts with them or contributes to identifying or overcoming them (within a social/gender justice framework) is not discussed.

III. Sustainable Economy

The other highlighted topic in the Austrian policies is sustainable economy. While the documents do not refer to justice and equity, they do draw on ways Austria has tried to improve affordability and accessibility of energy and energy technologies. For instance, the #mission2030 policy has a clear focus on environmental and ecological issues under the constraint that security of supply, competitiveness, accessibility and affordability have to be ensured as well:

“The central goal of the government's climate policy is to reduce greenhouse gas emissions. [...] This requires a coordinated, concerted climate and energy policy that ensures a balance between environmental sustainability, competitiveness/affordability and security of supply now and in the future.”
(#mission, p. 6, translation by ÖGUT, see Annex 1 for original quote)

Following this recommendation, the policies directly associate affordability with energy poverty. The only exception is the Regierungsprogramm which discusses poverty in general and recommends combating measures for some identified groups like children and seniors to ensure their participation in the social and cultural life without exclusion and discrimination.

The word “energy poverty” is used 22 times in the NECP, stressing the necessity of incorporating energy poverty into climate and energy targets. In the NECP, Austria acknowledges that there are multiple ways to define energy poverty, and provides the description that the Austrian federal government uses as below:

“A household is considered energy poor if its income is below the at-risk-of-poverty threshold and, at the same time, it has to cover above-average energy costs.” (NECP, p. 97)

The document continues to discuss energy poverty, drawing on statistics and studies - justifying the outlined recommendations. Among those suggestions, Austria points to maintaining or implementing various legal and economic measures such as protecting energy users with targeted consumer laws and enforcing balanced and dynamic electricity tariffs. Furthermore, the policies mention the “Tax Reform Act 2020”, “Electricity Tax Act” and other tax reliefs for investment in bio- and renewable gasses, as well as photovoltaic or producing and consuming energy by renewable systems. These mechanisms are in place to decrease the consumption of fossil fuels and reduce the pressure on energy-poor people and energy communities. Even though it might be beyond the scope of the selected policies, they fail to outline which groups of people (considering the intersection of gender, age, class, and ethnicity) struggle with or are at risk of energy poverty, how the recommended measures can be tailored toward the needs of vulnerable groups, and how can alternative systems be developed to combat institutionalized inequalities.

Another example of sustainable economic measures is Austria’s efforts in the development and implementation of a Green Finance Agenda to create suitable frameworks for the mobilization of private capital to solve societal challenges, especially in the area of climate protection and energy (Regierungsprogramm 2020-2024, p.75). This agenda aims to convene companies to form common strategies for a sustainable investment policy, investigate and modernize the existing laws, and boost green financial literacy (NECP, p. 142). While such measures might be a good way to also increase people’s participation in energy transitions

through green investments, research suggests that the diversity of energy incentives and community energy participants is low, and women and youth are underrepresented (Radtke & Ohlhorst, 2021). Additionally, people with higher capital (higher income and interest) are less likely to change their behavior; so, impactful policies require revisitation of social structures (Radtke et al., 2022). Therefore, we encourage policymakers to reflect on who can invest in the suggested bonds and incentives, what would be the implication of such investments for those who cannot afford/participate in it, and how can such strategies become empowering across diverse gender, age, class, and ethnic groups.

IV. (In)visible Users

As mentioned above, Austria is committed to mainstreaming the SDGs in all policy areas. This pledge is also mentioned in our selected policy documents. SDG 5 is concerned with gender equality and providing equal access to decent work, education, and health care for women and girls, as well as representation in socio-political and economic decision-making processes (*Sustainable Development Goals (SDG 5)*, n.d.). In the NECP document, the word “gender” appears 5 times in relation to SDG 5, compacted in two paragraphs, highlighting the cross-cutting benefits of gender equality for achieving sustainable development.

“As one of the basic prerequisites for sustainable development, real equality between the genders is anchored in the SDGs as a cross-cutting issue. These state that the 17 Sustainable Development Goals are geared towards achieving gender equality, and achieving this equality will in turn make a decisive contribution to the progress of all of the goals. One of the key factors is that women have political participation and decision-making power at all levels on an equal footing with men.

In the Austrian constitution, the federal government, provinces and municipalities have committed themselves to real gender equality. Austria implements this through the strategy of gender mainstreaming, which involves taking into account the impact on both sexes from the outset of all decision-making processes. The aim is to achieve equality between women and men by keeping the gender perspective in mind in all areas and at all levels of policy making and corresponding action. Austria is thus fulfilling its obligations at national, European and international level.” (NECP, p. 7)

The document not only uses the words “sex” and “gender” interchangeably but also follows a gender binary classification rendering people with other gender identities (e.g., non-binary or trans people) invisible. The other policy documents fail to go beyond the gender binary or do not mention gender equality at all. Furthermore, it is unclear how “real” gender equality is defined, and what instruments, mechanisms, and measures are devised to ensure its achievement in the reviewed policies. It would have been useful for the readers to find linkages to the gender mainstreaming strategies of Austria on a regional, national, European and international level in these policy documents.

The factor of age has found little recognition in the documents as well. Except for the energy-poor people who cannot afford electricity, the non-industrial energy users are framed as a

homogeneous group. This lack of distinction and targeted solution finding is problematic and a cause for actively making groups invisible. For instance, in the NECP, under the transport section, it is suggested that walking should be promoted and adopted as a form of low-carbon lifestyle, and it is completely imperceptive of individuals, such as elderly and/or disabled people, who might not be able to walk:

“Walking is a form of mobility which people throughout society can afford and practice regardless of age, whereby all individuals can make a contribution towards reducing CO2 emissions caused by transport.” (NECP, p. 109)

Words such as users, consumers, customers, prosumers (producers and consumers), citizens, people, market participants, individuals and households are used in all policies to refer to non-industrial energy users. Except for the Regierungsprogramm, which is not solely an energy plan, the rest of the policies are highly technical without direct or clear connections to the social dimensions and societal challenges/barriers. As an example, the NECP, #mission2030 and LTS document briefly mention that the acceptance of new measures must be promoted. However, people are portrayed as relatively passive - it is their acceptance that must be increased, not their participation in the energy transition or solution finding. Therefore, it seems that the measures are implemented in a country without citizens with different wants, needs, voices, prospects, limitations, and abilities.

V. Conclusion: the uninhabited, green country

To conclude, despite Austria's efforts toward social justice and gender equality, our analysis suggests that the selected policies are highly technical and do not deeply engage with the mentioned notions. While Austria moves toward becoming the global leader in energy innovation, its focus must not be limited to technology, but also the diverse user groups of such interventions. Moreover, we believe the inclusion of energy poverty, its working definition, and recommended measures, especially in the NECP document, is a good starting point for the Austrian policymakers to reflect more on social inclusions, those who are rendered invisible, and targeted measures for vulnerable and/or hard to reach people.

VI. References

Aus Verantwortung für Österreich. Regierungsprogramm 2020–2024. (2020). Bundeskanzleramt Österreich. <https://www.bmkoes.gv.at/Ministerium/Regierungsprogramm.html>

Austria and the 2030 Agenda. Voluntary National Review – Report on the Implementation of the Sustainable Development Goals. (2020). Austrian Federal Chancellery. https://sustainabledevelopment.un.org/content/documents/26511VNR_2020_Austria_Report_English.pdf

ENERGY Research and Innovation Strategy. (2017). Federal Ministry for Transport, Innovation and Technology. https://nachhaltiqwirtschaften.at/resources/e2050_pdf/E-Forschung_Kurzfassung_englisch_v2.pdf

Integrated National Energy and Climate Plan for Austria 2021-2030. (2019). Federal Ministry Republic of Austria Sustainability and Tourism. https://energy.ec.europa.eu/system/files/2020-03/at_final_necp_main_en_0.pdf

Langfriststrategie, Periode bis 2050. (2019). Bundesministerium für Nachhaltigkeit und Tourismus. https://www.bmk.gv.at/themen/klima_umwelt/klimaschutz/aktives-handeln/lts2050.html

#mission2030. *Die österreichische Klima- und Energiestrategie*. (2018). Bundesministerium für Nachhaltigkeit und Tourismus & Bundesministerium für Verkehr, Innovation und Technologie. https://gruenstattgrau.at/wp-content/uploads/2021/01/20_18_beilagen_nb-1.pdf

Radtke, J., & Ohlhorst, D. (2021). Community Energy in Germany – Bowling Alone in Elite Clubs? *Utilities Policy*, 72, 101269. <https://doi.org/10.1016/j.jup.2021.101269>

Radtke, J., Yildiz, Ö., & Roth, L. (2022). Does Energy Community Membership Change Sustainable Attitudes and Behavioral Patterns? Empirical Evidence from Community Wind Energy in Germany. *Energies (Basel)*, 15. <https://doi.org/10.3390/en15030822>

Sustainable Development Goals (SDG 5). (n.d.). United Nations Western Europe. Retrieved December 8, 2022, from <https://unric.org/en/sdg-5/>

MORE INFORMATION: The project "IEA Users TCP: 'Empowering all' Gender equality for the energy transition" is carried out within the scope of the IEA research cooperation on behalf of the Austrian Federal Ministry for Climate Protection, Environment, Energy, Mobility, Innovation and Technology.

More information about the project can be found at:

- nachhaltigwirtschaften.at/de/iea/technologieprogramme/users/iea-users-annex-empowering-all.php
- userstcp.org/task/gender-energy-annex/

 **Bundesministerium**
Klimaschutz, Umwelt,
Energie, Mobilität,
Innovation und Technologie

 **IEA Forschungskooperation**
im Rahmen von open4innovation

 **FFG**
Forschung wirkt.

Imprint:



ÖGUT
Hollandstraße 10/46, 1020 Wien
E-Mail: office@oegut.at, Web: www.oegut.atWien, 2022

DOI:<https://doi.org/10.47568/7XR133>