FRA EUROPEAN UNION AGENCY FOR FUNDAMENTAL RIGHTS

FUNDAMENTAL RIGHTS AND HOUSING IN THE EU'S CLIMATE AND ENERGY TRANSITION



REPORT

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Key findings and FRA opinions

Climate change poses significant threats to fundamental rights and disproportionately affects people in situations of vulnerability, including those at risk of discrimination and poverty. Addressing climate change is therefore essential to ensuring the protection of a range of fundamental rights. At the same time, climate transition policies and measures may not benefit everyone equally and may even negatively affect certain fundamental rights. A human-rights-based approach (HRBA) to climate mitigation and adaptation policies is key to ensuring that fundamental rights are protected in the European Union's (EU) climate and energy transition.

Energy savings and the energy transition lie at the heart of the EU's policies to achieve climate neutrality by 2050 and to cut emissions by 2030 by at least 55 % compared to 1990 levels. Energy renovations are an important element of climate and energy transition measures for reducing energy consumption through the improved energy efficiency of buildings and clean energy installations. They contribute to climate mitigation and can help address energy poverty (see Legal corner – Energy poverty definition) and improve the adequacy and climate resilience of housing. In this way, they offer an opportunity to advance fundamental rights in the climate and energy transition – including the right to adequate housing – but they may also create negative side effects for fundamental rights and leave people behind in the process.

The evidence presented in this report shows that fundamental rights are not systematically integrated into the legal and policy frameworks on the climate and energy at the EU or national levels. Whereas applicable laws and policies often explicitly refer to principles such as 'leave no one behind' and 'just transition', references and safeguards to human rights are often fragmented and superficial. Policies and implementing energy renovation programmes and projects rarely address fundamental rights risks or outline concrete safeguards to ensure that these principles are applied in practice. This report calls for the EU and its Member States to adopt a HRBA to energy renovations and measures addressing energy poverty to ensure fundamental-rights-compliant climate and energy transition.

Integrating fundamental rights into the climate and energy transition

A number of rights and principles that should be protected and implemented in the context of climate change and in the EU climate and energy transition are enshrined in the European Union Charter of Fundamental Rights (hereinafter 'the Charter') and international human rights law. These include access to services of general economic interest (Article 36), non-discrimination (Article 21), the right to health (Article 35), environmental protection (Article 37) and the right to housing assistance to combat social exclusion and poverty (as recognised in Article 34 of the Charter). The right to housing encompassing access to energy is also guaranteed under the

International Covenant on Economic, Social and Cultural Rights (ICESCR), the Convention on the Rights of Persons with Disabilities (CRPD) and the European Social Charter (ESC). The Aarhus Convention grants the rights to access to information, participation, and access to justice in environmental decision-making.

The EU Regulation on the Governance of the Energy Union and Climate Action (the Governance Regulation) is a key instrument for a coordinated climate and energy transition in the EU, including through the national energy and climate plans (NECPs). Member States were due to submit their final NECPs by June 2024, followed by second of their biannual national energy and climate progress reports (NECPRs) in June 2025. The European Commission (the Commission) set out to revise NECPs for the post-2030 period as part of the possible upcoming revision of the regulation. The 2025 European Commission assessment of the final NECPs indicates that the plans, if implemented, are on track to achieve greenhouse gas (GHG) emissions reduction targets. However, they lack in-depth analysis of the social and employment impacts of a just transition, especially for vulnerable households and regions, and they do not provide measures to address these impacts. The Commission's assessment does not explicitly address fundamental rights or gender equality. FRA's analysis of the final NECPs identifies significant gaps when it comes to fundamental rights.

FRA opinion 1

In accordance with the Charter and applicable international human rights law, the EU and its Member States should systematically integrate fundamental rights, including gender equality, when designing and implementing their climate and energy policies. The upcoming revision of the Governance Regulation should explicitly require Member States to consider fundamental rights risks and impacts throughout their national climate and energy planning, implementation and reporting cycle.

The Commission should provide guidance to help Member States effectively incorporate fundamental rights into their national climate and energy policy planning, implementation and monitoring, and to systematically report on them in the NECPRs.

Strengthening fundamental rights safeguards in designing and implementing energy renovation policies

EU law and policy including the Energy Efficiency Directive (EED), the Energy Performance of Buildings Directive (EPBD), the Renewable Energy Directive (RED), the Social Climate Fund Regulation (SCFR) and the Renovation Wave provide a framework for implementing energy renovations and addressing energy poverty. These measures recognise housing affordability, sustainability, health and access to clean and affordable energy as interlinked objectives. The EED introduces a definition of energy poverty as a household's lack of access to essential energy

services necessary for a basic and decent standard of living and health. It indicates that Member States should implement energy efficiency and related energy savings measures as a priority among people affected by energy poverty, vulnerable customers, people in low-income households and, where applicable, people living in social housing. Several other instruments, including the EPBD and SCFR, explicitly target and address people in vulnerable situations, referring to definitions of 'vulnerable customers' or 'vulnerable households'. Member States were required to transpose the directives into national law in 2025 and 2026. They also needed to submit draft social climate plans (SCPs) by June 2025 and draft national building renovation plans (NBRPs) by 31 December 2025.

At the same time, the abovementioned EU energy and climate change legislation does not comprehensively address situations of vulnerability, nor does it provide for concrete support measures. It is left to Member States to further identify people in vulnerable situations and to design relevant measures in the national context.

Research by the EU Agency for Fundamental Rights (FRA) reveals significant gaps in the legal recognition of groups at risk of energy poverty and in identifying or addressing their needs. Where safeguards and mitigating measures exist, these are often not evidence-based and not integrated into the actual programmes, leading to fundamental rights 'blind spots'. While the EU legislative framework foresees certain safeguards, these are often not implemented in the national context. National implementation of EU climate and energy measures is an opportunity for Member States to introduce meaningful fundamental rights safeguards, taking into account the needs of people in vulnerable situations.

Furthermore, EU funding for climate- and energy-related measures at the Member State level, including energy renovations, is provided via different EU funds, which should be implemented in compliance with the Charter.

FRA opinion 2

Member States should incorporate fundamental rights safeguards when implementing the EU climate and energy law and policies, including in their SCPs and NBRPs. They should identify and address the potential negative impacts of proposed measures on fundamental rights, including on the right to housing.

FRA opinion 3

Member States should establish a comprehensive, rights-based definition of vulnerability in the context of their national climate and energy transition measures, including those relating to energy renovations and addressing energy poverty. They should identify the rights and needs of people in vulnerable situations and develop tailored action to reach and support them. This should be done

in partnership with local actors and representatives of vulnerable groups and avoid stigmatising practices or language.

The lack of equal access to renovation measures impacts the right to housing

The right to housing is protected under international human rights law and requires that housing should be of adequate standard and encompass access to essential services, including energy. The right to housing assistance is also recognised in Article 34 paragraph 3 of the Charter. Adequate housing is an explicit element of the right of persons with disabilities to an adequate standard of living and social protection, as enshrined in Article 28 of the CRPD, to which the EU is itself a party. Furthermore, Article 36 of the Charter recognises the right to services of general economic interest and Article 21 of the Charter prohibits discrimination, including in the context of electricity services, as underlined in the *CHEZ Razpredelenie Bulgaria* judgment of the Court of Justice of the European Union (C-83/14). The right to housing and access to energy are also key to the effective enjoyment of other fundamental rights, such as the right to health, human dignity and the rights of the child.

Energy renovations generally have a positive impact on the right to adequate housing and access to affordable and clean energy. However, FRA's research suggests that energy renovation and decarbonisation programmes often inadvertently exclude certain groups due to a lack of targeted outreach and support.

In general, the eligibility criteria of programmes relate primarily to the technical aspects of buildings, rather than the needs and different situations of potential applicants, especially those who may be at a disadvantage in benefiting from energy transition programmes or who may be negatively affected by such programmes. Information about programmes and application processes tends to be complex and be predominantly available online, potentially excluding people with lower digital skills, knowledge or income. Financing renovation costs and access to finance are further significant barriers, as many programmes require beneficiaries to co-finance or provide upfront payment, which can be challenging for those on low and middle incomes.

When such barriers are not effectively addressed, and when the design of the programme does not take into account specific situations of potential applicants, they are likely to exclude people and households already in vulnerable situations, such as those in housing with a poor energy performance, those with a low income, those with specific needs related to disability or health issues and those affected by other factors such as single parenthood and age. While such programmes help achieve national emission reduction and energy efficiency goals, they may leave vulnerable groups behind.

FRA opinion 4

The EU and its Member States should, within their respective competencies, ensure that people living in housing with a poor energy performance and without sufficient means to carry out renovations can benefit equally from programmes and funds for energy efficiency renovations.

The design and implementation of the programmes are key to guaranteeing equal access to programmes in practice. The definition of target groups, eligibility criteria, application process, funding levels and financial tools, along with communication and support provided to applicants at different stages, should be designed to overcome barriers. Member States should learn from promising practices, such as state guarantees and interest free loans, one-stop-shops, free-of-charge consultants and application support centres where individuals can receive direct assistance with application processes and support throughout the process of renovation. Member States should also build awareness of such programs in a transparent and tailored manner to reach different beneficiaries equally, considering the rights and context of the most vulnerable.

The Commission should consider issuing dedicated guidance on how to implement energy renovation programmes in a fundamental-rights-compliant manner, including practical examples and promising practices that could be replicated across Member States.

Protecting the rights of tenants in energy renovations

FRA's research shows that energy renovation programmes typically target building or apartment owners, usually excluding tenants who often live in buildings with poor energy efficiency. Furthermore, programmes lack safeguards to protect tenants from negative consequences like increased rent or displacement following renovations. While examples of dedicated support for tenants have been identified, these are not implemented systematically or on a large scale across Member States. More than 30 % of the EU's population lives in rental housing – among these over 50 % are people with lower incomes, who are most at risk of experiencing energy poverty. Protection of tenants and targeted measures are key to ensuring that people living in rental housing – including private, public and social housing – can benefit from the EU's energy transition.

FRA opinion 5

Member States should ensure that energy renovation programmes and related measures safeguard the rights of tenants. Such measures could include dedicated programmes for the renovation of rental apartments and residential buildings, incentive schemes for landlords to undertake energy renovations while implementing safeguards to protect tenants' rights and interests during the renovation process, dedicated support for tenants and programmes targeting tenants and individuals living in social housing, ensuring that they benefit equally from energy efficiency improvements.

People confronted with housing deprivation are at risk of being left behind in the climate and energy transition

Measures taken as part of the climate and energy transition often lack tailored safeguards to address specific vulnerabilities, potentially increasing existing fundamental rights risks and further exacerbating energy poverty. By facilitating more efficient energy consumption and therefore reducing energy costs, energy efficiency renovations can help address energy poverty. Yet without effective equal access to energy renovation programmes, the available resources and support cannot reach those who need it most, thereby resulting in negative consequences, including undermining housing affordability.

At the same time, people who live in precarious or informal housing (such as Roma living in informal settlements) are not only excluded from funds and programmes aiming to improve energy efficiency, but they may also face a lack of access to energy and electricity at the most basic level, for example by not having reliable access to electricity grid – a phenomenon sometimes referred to as extreme energy poverty. At the same time, they may be disproportionately exposed to the negative effects of climate change, such as extreme weather events.

These situations of housing deprivation and exclusion should be addressed in a comprehensive way in the context of the climate and energy transition. In 2025 and 2026, the Commission will revise the European Pillar of Social Rights (EPSR) action plan and, for the first time, will adopt an EU Anti-Poverty Strategy and implement the first European Affordable Housing Plan. These measures present unique opportunities to integrate social policies into the climate and energy transition, and to guarantee enjoyment of fundamental rights for all.

FRA opinion 6

In developing its new EPSR action plan and EU Anti-Poverty Strategy, and implementing the European Affordable Housing Plan, the EU should explicitly consider and address the climate and energy transition context, and specific vulnerabilities related to housing deprivation. These strategies should ensure a comprehensive approach to integrating social policies into the climate and energy transition so that they protect the right to adequate housing and access to energy for everyone.

Participation and stakeholder engagement in the energy transition is often a one-off exercise and is not inclusive

Participation and stakeholder engagement in the development of relevant climate and energy

policies are required by law, including by the Aarhus Convention, the Governance Regulation, the EED, and also by national laws in Member States. In most cases, engagement with relevant stakeholders is provided for only in the preparatory phases of policy frameworks. It is very rare at later stages, such as during the monitoring and evaluation phases of programmes and mechanisms. Specific safeguards for including the views of different groups or regions are often absent, or it is unclear how stakeholders' inputs were taken into account in the design and implementation of policies and programmes.

FRA opinion 7

Member States should ensure meaningful public participation in the design and implementation of climate and energy policies. They should consult relevant stakeholders, ensuring transparent and inclusive processes that enable meaningful engagement, with adequate consultation methods adapted to the specific situations of different stakeholders, and sufficient time to contribute. Contributions of stakeholders and the public should be taken into account in decision-making on energy efficiency policies or programmes as far as possible, and the public should be duly informed about how the results of the consultation were ultimately taken into account.

Lack of transparency and information for complaint mechanisms hinder access to justice

Access to justice and effective remedy is a right protected under the Charter, and in environmental matters under the Aarhus Convention. It also underpins a HRBA. FRA's research has revealed unintended negative side effects of some of the energy renovation programmes, such as inflated market prices for construction materials, services, rent or a windfall profit by private enterprises participating in the programmes, and delivery of poor-quality work. Complaint mechanisms exist in all Member States, but the lack of transparency and limited information regarding the complaint proceedings, along with inconsistent approaches, hinder access to these mechanisms in practice. Although the administrative review or judicial proceedings are possible, the access to justice is complicated by the very technical legal language, the costs of proceedings and lack of information.

Furthermore, while in some Member States the national or regional human rights institutions provide support for people in energy poverty, FRA research highlights the limited role and involvement of equality bodies and national human rights institutions. This is often due to limited mandates or insufficient resources. If strengthened, these bodies could further support beneficiaries of programmes in accessing justice and effective remedy.

FRA opinion 8

Pursuant to their obligations under the Charter and the Aarhus Convention, Member States should establish independent, transparent and accessible complaints mechanisms that are available in the context of climate and energy interventions and programmes. Member States are called upon to strengthen the role for national human rights institutions and equality bodies with adequate mandates, expertise and resources to support access to justice and effective remedy in the context of climate and energy measures.

Need for integrated and systematic monitoring and data collection for a just climate and energy transition

Transparency and accountability are key operational principles of a HRBA, which should apply at all stages of the design, implementation and transparent monitoring of energy efficiency measures to ensure effectiveness and social acceptance of the green transition. The EU better regulation guidelines call for evidence-based lawmaking and monitoring of the implementation of EU legislation. Human rights indicators are essential for the implementation of human rights standards and commitments and to support policy formulation, impact assessments and transparency. The better regulation guidelines require that a clear link between objectives and indicators be established.

FRA's research shows that that there is currently no comprehensive monitoring framework to evaluate the impact of environmental factors or policies on fundamental rights at the EU level. This report shows that there are several monitoring mechanisms and indicators to track the implementation and progress on the implementation of the European Green Deal and the EPSR, but these are not well aligned and therefore cannot effectively capture the fundamental rights impacts of climate and energy transition measures. Furthermore, at both the EU and national levels, the indicator systems lack disaggregation and cannot reflect potential fundamental rights risks and the impact of these measures on groups in vulnerable situations, such as people with disabilities, those from a minority background, children and young people and people with intersecting characteristics (e.g. older women and children with chronic health issues).

FRA opinion 9

The EU and its Member States should include relevant and disaggregated data on socioeconomic and fundamental rights impacts when measuring and reporting on progress towards climate targets through measures taken as part of the climate and energy transition. Reports and data should be timely and made publicly available and take into account people and regions in situations of vulnerability and the impact on specific fundamental rights. In the absence of quantitative data, qualitative assessment should be used. FRA could support the Commission in developing guidance on specific fundamental rights indicators to help Member States meaningfully incorporate fundamental rights into their climate and energy policy planning,

implementation, monitoring and to report on them systematically in the NECPRs, SCPs and NBRPs.

Introduction

Amid soaring energy prices and the cost-of-living crisis, 9.2% of Europeans in 2024 experienced energy poverty. This put the effective exercise of the fundamental rights at risk for many. These risks are not evenly distributed in society. For example, older people, women, people with disabilities, people with lower incomes, and those with a diverse ethnic or migrant background are disproportionately negatively affected. Rising energy prices are further compounded by the EU housing crisis: housing prices have increased on average by 48 % in less than 10 years between 2015 and 2023.

The right to housing and access to energy are preconditions to the effective enjoyment of many other fundamental rights, including the right to health. The EPSR Action Plan highlights the links between addressing energy poverty and ensuring access to affordable quality housing, particularly for medium- and low-income households. The Commission Recommendation on energy poverty (C/2023/2407) stresses the need to protect vulnerable households from higher housing costs related to renovations, including protecting tenants from evictions in line with Principle 19 of the EPSR. A recent Joint Research Centre (JRC) brief highlights the connections between housing quality and affordability and energy poverty, and the need for the EU to tackle the dual challenge of affordable and energy-efficient housing. Access to adequate housing has become simply unreachable in some Member States and for some groups.

These risks frequently coincide with those posed by the climate crisis itself: people living in inadequate housing, people experiencing poverty, and those in other vulnerable situations or marginalised groups are more often exposed to the negative effects of climate change. In this context, energy renovations of residential buildings are key measures at the intersection of the climate, energy and housing crises. Decarbonising heating and cooling systems and ensuring energy efficiency of the existing building stock is an important element for meeting the EU climate mitigation objectives. Buildings are responsible for 34 % of all EU energy-related greenhouse gas emissions, 60 % of air pollutants ($PM_{2.5}$) from energy use emissions, and 40 % of energy consumptionin the EU. On top of this, 75 % of all buildings in the EU are energy inefficient. The European Environment Agency (EEA) European Climate Risk Assessment finds that there is substantial risk to human wellbeing from climate change impacts on residential and non-residential buildings in the near term (2021–2040) and mid-term (2041–2060) (p. 189). Renovations are therefore also relevant for strengthening climate resilience, implementing climate adaptation measures at the building and neighbourhood levels, and protecting health and wellbeing in homes across the EU.

As the EU continues its path towards net-zero and clean energy, required by the European Green Deal, the European Climate Law and the Governance Regulation, a series of related legislative measures advancing the EU climate and energy agenda are set to take effect between 2025 and 2028. Among them are the Emissions Trading System for Buildings and Transport (ETS-2), the Social Climate Fund Regulation, the Energy Efficiency Directive (recast), the Renewable Energy

Directive (recast) and the Energy Performance of Buildings Directive (recast). The EU is also continuing the implementation of the Renovation Wave. These initiatives aim to significantly reduce GHG emissions, improve energy efficiency and address social impacts such as energy poverty. The Commission has also presented the Affordable Energy Action Plan, and the first European Affordable Housing Plan. These measures set out incentives for the energy transition of buildings and create opportunities to address energy poverty and improve the living conditions in homes across the EU: ensuring insulated, energy-efficient homes with access to clean energy.

Against this background, energy renovations offer opportunities to strengthen the protection and fulfilment of fundamental rights of everyone living in the EU, and especially for those in the most vulnerable situations and at risk of poverty and social exclusion. At the same time, they may also have adverse effects on fundamental rights if these are not adequately safeguarded.

Firstly, energy-efficient buildings equipped with clean energy installations enable and support access to affordable and clean energy.

Secondly, energy renovations contribute to climate change mitigation by limiting harmful GHG emissions and air pollutants. They also support climate adaptation and resilience. For example, better insulated homes offer more protection from extreme external temperatures. At the same time, the extraction of minerals needed for the transition to clean energy poses environmental and human rights risks. Housing construction and renovations come with their own carbon footprint and other environmental risks.

Thirdly, renovations carried out in the context of decarbonisation lead to an improvement in the overall standards of houses, which contributes to an adequate standard of housing. At the same time, renovations may lead to increased property values and rents, further undermining housing affordability – in particular for persons with low- and middle-incomes, tenants and other people in different vulnerable situations and contexts.

Energy renovations should be therefore implemented in a fundamental-rights-compliant way, especially for those who are in situations of vulnerability and are most at risk. FRA's previous report Towards a fundamental-rights-compliant European Green Deal argues that fundamental rights are not systematically integrated into the European Green Deal's policies, leading to potential fundamental rights 'blind spots'. It recalls the legal obligations of the EU and the Member States to ensure compliance with the Charter as an integral part of the development of future climate and environmental legislation and policies. It highlights the necessity for a human-rights-based approach in the EU's green transition.

The findings and analysis of this report build on the foregoing arguments, focusing specifically on energy transition measures, decarbonisation, energy renovations and energy poverty projects in the context of residential buildings and housing. It explores how these measures may directly and indirectly impact on fundamental rights in the EU.

In 2024, FRA collected data through its Franet research network with a focus on the priority strand of the European Green Deal of clean, affordable and secure energy, and specifically on measures addressing energy renovations in residential buildings and/or energy poverty, to explore

fundamental rights implications, challenges, gaps and promising practices. The following qualitative fieldwork research in 10 Member States (Belgium, Czechia, Estonia, Germany, Greece, France, Poland, Slovakia, Spain, Sweden) provides data on projects or programmes targeting decarbonisation, energy efficiency and energy poverty in these countries. The report presents the main findings, including an analysis of the relevant EU climate and energy legislation, and national energy and climate plans across the EU-27 and three FRA observer countries (Albania, North Macedonia and Serbia). The report features the identified promising practices (in policy and practice) throughout Chapters 3–5.

The report is addressed at policymakers, experts, practitioners and civil society organisations involved in the design and implementation of decarbonisation, energy-efficiency renovations and energy poverty responses at the EU, national and local levels.

Following the core principles of a human-rights-based approach, the report is structured as follows. Chapter 1 discusses the fundamental rights obligations and considerations in the context of the EU's climate and energy transition. Chapter 2 presents findings on how these are reflected in the NECPs. Chapter 3 considers the principle of 'leave no one behind' in the energy transition, focusing on issues of equal access to renovation and energy transition measures, attention to people in situations of vulnerability and energy poverty. Chapter 4 analyses meaningful inclusion in policy processes and implementation, exploring transparency, communication and meaningful participation and stakeholder engagement. Chapter 5 addresses accountability and governance of energy and renovation policies and programmes, including monitoring and data collection and complaints mechanisms, and analyses how these structures can support fundamental-rights-compliant policy implementation.

1. Access to energy and the right to housing in the climate and energy transition

Access to energy is recognised as a prerequisite for the fulfilment of human rights such as the right to health and education, and also as an element of the right to an adequate standard of living, including the right to housing, in the decisions and commentaries of international human rights mechanisms.

Energy renovations – modernisation and retrofitting of buildings and dwellings aimed at improving their energy efficiency or equipping them with access to modern and clean energy installations – are not widely considered a fundamental rights issue, yet they may impact fundamental rights in a variety of ways. Such measures enable access to clean and affordable energy and adequate housing, on which the enjoyment of many fundamental rights depends. A climate-resilient house is key to protecting its inhabitants from the negative impacts of climate change.

The Charter enshrines a number of rights and principles that should be considered in the context of energy renovations (See Legal corner – The EU Charter of Fundamental Rights protecting equal access to energy and housing).

Legal corner – The EU Charter of Fundamental Rights protecting equal access to energy and housing

The Charter protects equal access to energy and housing through several provisions and principles, namely access to services of general economic interest (Article 36) and the right to social and housing assistance to combat social exclusion and poverty (Article 34). It also prohibits any form of discrimination (Article 21).

Other relevant Charter provisions include:

- the right to human dignity (Article 1);
- respect for private and family life (Article 7);
- equality between men and women (Article 23);
- the rights of the child (Article 24), elderly (Article 25)andpersonswith disabilities (Article 26).

This chapter outlines considerations on access to energy and the right to housing in the current EU and international human rights law context, in particular how access to energy is linked to fundamental rights, and how the right to housing may be impacted by energy renovations.

1.1 International framework on access to affordable and sustainable energy

In international human rights law, access to energy is considered primarily in the context of housing. The right to housing under international human rights law is an explicit element of the right to an adequate standard of living (Article 11 of the ICESCR, general comments No 4 (1991) and No 7 (1997) of the Committee on Economic, Social and Cultural Rights, along with Article 28 of the CRPD and Article 27 of the Convention on the Rights of the Child). While the ICESCR does not explicitly include energy as a component of this right, the United Nations (UN) Committee for Economic, Social, and Cultural Rights has confirmed that access to energy and electricity is required in the context of the right to adequate housing under Article 11 (General Comments No 4 (1991) and No 7 (1997)). Moreover, the International Court of Justice has opined that:

> **[T]here is a close connection between the environment and the right to an adequate standard of living, which, for its part, encompasses access to food, water and housing, as set out in Article 11 of the ICESCR and Article 25 of the Universal Declaration of Human Rights.**
>
> *International Court of Justice, Advisory Opinion on obligations of states in respect of climate change of 23 July 2025, paragraph 380.*

Goal 7 of the UN Sustainable Development Goals (SDGs) calls for universal access to affordable, reliable, sustainable and modern energy. Access to energy is also necessary for the realisation of rights enshrined in the ESC (see Legal corner – Human rights and access to energy under the revised ESC: the Cañada Real Galiana decision).

Legal corner – Human rights and access to energy under the revised ESC: the Cañada Real Galiana decision

In its decision on Complaint No 206/2022, published in February 2025, the European Committee of Social Rights decided on a complaint regarding the impact of the lack of access to electricity on the fundamental social rights of residents of Cañada Real Galiana. It is a large shanty town in Madrid, Spain, where around 4 500 people, including 1 800 children, have been affected by power outages, negatively impacting different aspects of their lives and health.

The Committee has found the violation of a number of rights under the ESC, including:

- the right to housing (Article 31), as stable, consistent and safe access to adequate energy is necessary in 'adequate housing';
- the right of the family to social, legal and economic protection (Article 16), as regards the right to adequate housing and the right of families concerned and their associations to be involved in decision-making on policies and measures that concern them;
- the right to protection of health (Article11), including prevention of ill-health (Article11§1) and protection from epidemics, diseases and domestic accidents (Article11§3);
- the right of children and young people to social, legal and economic protection (Article17, including Article17§1 and Article17§2 as regards the right of children to education);
- the right to protection against poverty and social exclusion (Article30);
- the right of elderly people to social protection (Article23); and
- the right of people with disabilities to independence, social integration and participation in the life of the community (Article15§3).

Source: European Committee of Social Rights, Decision on merits – Defence for Children International (DCI), European Federation of National Organisations working with the Homeless (FEANTSA), et al. v. Spain, Complaint No 206/2022, 11 September 2024.

The United Nations Convention on the Elimination of All Forms of Discrimination against Women, ratified by all EU Member States, is the only international human rights law that explicitly enshrines a human right to energy (electricity). Article 14(2)(h) includes electricity as an element of rural women's right to adequate living conditions. In its General Recommendation No 34 (2016), the Committee on the Elimination of Discrimination against Women highlights the gender dimension of 'poor access to modern energy supplies and services'.

Policy context – Conceptualisations of a self-standing right to energy in policy and academic literature

While international human rights law so far does not establish a self-standing right to energy (Hesselman (2022)), some scholars and civil society representatives have argued for acknowledgment of such a right based on the importance of energy access to fulfil basic human needs – analogous to the recognition of the right to water (e.g. Tully (2008), Walker (2016)). In this context authors point out

the need to consider certain aspects of access to energy and energy services, such as the rights to use energy and energy affordability (Walker(2016)), along with the rights to information, choice and participation (Shyu (2021)). There is no consensus as to what elements a self-standing right to energy should comprise. The need for a human-rights-based approach to energy is seen as a way to operationalise and implement 'energy justice' concepts (Huhta (2023), Wewerinke-Singh (2021)) and to address energy poverty (the Right to Energy Coalition, see also Hesselman et al. (2019)).

1.2 The link between the right to housing and sustainability

Energy renovations impact the right to housing, beyond ensuring access to clean energy. They are an opportunity to ensure adequacy, affordability, accessibility and habitability, along with the sustainability and climate resilience of homes. At the same time, they may negatively affect housing affordability and limit access to adequate housing for people in vulnerable situations and tenants. Ensuring equal access to energy renovation measures and effective safeguards to mitigate unintended harm are key to prevent negative impacts.

While housing policy lies within the competence of the Member States, the EU has direct or shared competence in relevant areas such as state aid and competition policy and energy policy. It can also have a supporting role, for example by providing guidance and funding, in line with the principle of subsidiarity. Ensuring the sustainability of housing is essential to address climate change and environmental pollution. Sustainable housing can be defined as 'low or zero emissions housing, that is built with regenerative [and] sustainable materials, and that adequately protects against climate-related disasters and weather'.

The right to housing is interdependent on other human rights in the context of climate change. In its landmark advisory opinion on obligations of states in respect of climate change, the International Court of Justice recognised the right to a clean, healthy and sustainable environment as a precondition of enjoyment of many human rights, including housing. The UN Special Rapporteur on adequate housing in the report on climate crisis advises that the right to housing **should also encompass sustainability**, in keeping with the right to a clean, healthy and sustainable environment.

1.3 Energy as an essential service in the European Union's framework

EU law and policy consider energy an essential service. While there is no explicitly recognised self-standing right to energy in EU primary law (Cuyvers et al., 2024), the Charter enshrines and recognises a number of relevant rights and principles (see Legal corner – The EU Charter of

Fundamental Rights protecting equal access to energy and housing).

Article 36 of the Charter enshrines the principle of respect by the EU for the access to services of general economic interest, in line with Article 14 of the Treaty on the Functioning of the European Union (TFEU). Protocol 26 of the Treaty on European Union (TEU) outlines the shared values that direct the EU's activities in this area: the essential role and wide discretion of the Member States' authorities; the diversity between services and differences of user preferences or needs; and ensuring a high level of quality, safety and **affordability**, **equal treatment** and the promotion of **universal access** and of **user rights**. Articles 122 and 194 TFEU outline the basis and objectives for EU energy policy. Article 194 TFEU also expressly links the EU's energy policy to the aims of guaranteeing a high level of environmental protection enshrined in Article 191 TFEU. These principles are incorporated into EU energy sector laws, which also reflect the principle of energy efficiency first.



Legal corner – Equality and non-discrimination in accessing energy services –services – *CHEZ Razpredelenie Bulgaria* judgment of the Court of Justice of the European Union (C-83/14)

In the *CHEZ Razpredelenie Bulgaria* case, the Court of Justice of the European Union (CJEU) has issued a preliminary ruling concerning the interpretation of Articles 1, 2, 3 and 8(1) of the Racial Equality Directive and of Article 21 of the Charter which prohibits discrimination based on racial or ethnic origin in the context of electricity services.

The CJEU considered questions relating to the placement of electricity meters which were positioned at a height of between six and seven metres in Roma districts of the town, whereas in other districts not densely populated by Roma they were usually positioned lower than two metres above ground.

The CJEU found that preventing consumers living in that district from being able to check their electricity meters for the purpose of monitoring their consumption was 'an offensive and stigmatising practice', which, if it was introduced or maintained because of the ethnic origin of most of the district residents, would constitute direct discrimination. The CJEU further specified that for a measure to amount to indirect discrimination, the measure does not need to be introduced because of any reasons relating to race or ethnic origin. It is sufficient that the measure, while using neutral criteria, 'has the effect of placing particularly persons possessing that characteristic at a disadvantage'.

Source: Judgment of the Court of Justice of 16 July 2015, CHEZ Razpredelenie Bulgaria, C-83/14, ECLI:EU:C:2015:480.

Principle 20 of the EPSR, adopted as a Commission Recommendation (EU) 2017/761 includes energy among the essential services to which everyone in the EU is entitled, and explicitly reiterates the services of general economic interest value of universal access.

Policy context – Principle 20 EPSR – Access to essential services

Everyone has the right to access essential services of good quality, including water, sanitation, **energy**, transport, financial services and digital communications. **Support for access to such services shall be available for those in need.**

The EPSR action plan highlights the link between essential services and social inclusion, requiring the adoption of legislation or measures for effective access to services and implementation of the sectoral laws and policies both at the EU level and by Member States.

EU secondary energy sector legislation increasingly incorporates and operationalises Principle 20 of the EPSR. For example, the EED, SCFR, the Just Transition Fund Regulation and the recast Gas Directive all explicitly refer to the EPSR and recognise energy as an essential service in line with its Principle 20.

Key EU climate and energy laws incorporate certain fundamental rights aspects, albeit not systematically (Table 1 and below).

Table 1 – Mapping of selected fundamental rights aspects in key EU climate and energy laws

EU law	Fundamental/ human rights	Social rights	Equality and non-discrimination	Gender equality	Vulnerable persons/groups	Access to energy	Affordable housing
European Climate Law	✔	✘	✘	✔	✔ In the context of adaptation – 'most vulnerable populations and sectors' (Article 5).	✘	✘

EU law	Fundamental/ human rights	Social rights	Equality and non-discrimination	Gender equality	Vulnerable persons/groups	Access to energy	Affordable housing
Energy Union and Climate Action Governance Regulation – > National energy and climate plans	✔	✔	✘	✔	✔ Refers to households in energy poverty, vulnerable consumers, energy poor consumers.	✔	✘
Effort Sharing Regulation	✘	✘	✘	✘	✘	✔	✘
Energy Efficiency Directive	✘	✔	✔	✘	✔ Prioritises measures among people affected by energy poverty, vulnerable customers, low-income households, and social housing (Article 24.4, Recitals 76, 78, 125).	✔ Defines energy poverty and emphasises access to essential energy services.	✘
Electricity Directive (recast)	✔	✔	✘	✘	✔ Defines 'vulnerable customers' and protects them from disconnections (Articles 27, 27a, 28).	✔ Establishes right to universal service and strengthens consumer rights.	✘
Gas Directive (recast)	✔	✔	✘	✘	✔ Provides safeguards for gas consumers, including vulnerable customers.	✔	✘

EU law	Fundamental/ human rights	Social rights	Equality and non-discrimination	Gender equality	Vulnerable persons/groups	Access to energy	Affordable housing
Renewable Energy Directive	✘	✘	✔	✘	✔Ensures accessibility of renewables self-consumption for low-income or vulnerable households (Articles 21.6, 22.4).	✔	✘
Energy Performance of Buildings Directive – > National building renovation plans	✘	✘	✘	✘	✔ Requires protecting vulnerable households from negative social impacts of renovation costs (Articles 9.4, 17.18).	✘	✔ Requires addressing housing affordability in NBRPs.
Social Climate Fund Regulation –> Social climate plans	✘	✔	✔	✔	✔Requires addressing social impacts of ETS-2 on vulnerable households, transport users and micro-enterprises.	✔	✔ Eligible measures include building renovation support for tenants and people living in social housing (Recital 24, Article 6.1(q)).

Alternative text: The table summarises how various EU climate and energy laws address selected fundamental rights aspects. For each law, the table shows whether specific aspects—such as human rights, social rights, equality and non-discrimination, gender equality, protection for vulnerable groups, access to energy, and affordable housing—are included. A checkmark means the law covers that aspect, while a cross means it does not.

Source: FRA.

1.3.1 Addressing energy poverty to ensure health and an adequate standard of living

The affordability of energy is a common theme in EU energy legislation and policy, primarily via its focus on energy poverty. The recent legislation and policy explicitly acknowledge the link between access to affordable energy and the standards of living and health. The recast EED introduces a

minimum EU-wide definition of energy poverty.

Legal corner – Energy poverty definition

'Energy poverty' means a household's lack of **access to essential energy services, where such services provide basic levels and decent standards of living and health**, including adequate heating, hot water, cooling, lighting, and energy to power appliances, in the relevant national context, existing national social policy and other relevant national policies, caused by a combination of factors, including at least non-affordability, insufficient disposable income, high energy expenditure and poor energy efficiency of homes'.

Source: Article 2 of the Energy Efficiency Directive.

1.3.2 Right of access to energy – including renewable energy – and users' rights

Some EU laws introduce specific safeguards for ensuring access to energy. For example, the recast Electricity Directive establishes a right to universal service (Article 27) and strengthens the rights of electricity consumers. It obliges Member States to define 'vulnerable customers' in this context and take appropriate measures to protect them, which may include social security benefits and energy efficiency support to tackle energy poverty (Article 28). The definition explicitly includes affordability considerations, along with specific energy needs, for example those linked to health or age (see also Chapter 3 2). The directive also requires that vulnerable consumers be protected from disconnections (Article 28a) and indicates that Member States may appoint a supplier of last resort (Article 27). The recast Gas Directive provides for related safeguards for gas consumers (Articles 26 and 28), also specifically in the context of gas phase-out (Article 13). The Commission will provide guidance on the protection of vulnerable customers and customers affected by energy poverty in this context (Article 27). Both these directives also explicitly refer to the Charter in their respective preambles, acknowledging the link between access to energy and fundamental rights.

In the context of energy decarbonisation, EU law also contains certain rules and safeguards for equal access specifically to clean and sustainable energy. The recast Renewable Energy Directive sets out, among other things, EU rules for renewable energy self-consumption and renewable energy communities. It requires that Member States put in place an enabling framework addressing the accessibility of renewables self-consumption and related barriers, including for low-income or vulnerable households and tenants (Article 21). Participation in renewable energy communities should be accessible to all consumers including for low-income or vulnerable households, and consumers participating in such communities should be treated in an equal and

non-discriminatory way (Article 22). The amendments introduced by Directive (EU) 2023/2413 as regards the promotion of energy from renewable sources also strengthen consumer rights of district heating and cooling users, for example by providing for the right to disconnect from non-efficient district heating and cooling systems (Article 23).

Legal corner – Right to energy in national legislation

Catalan Law 24/2015 on the housing and energy poverty crisis enshrines a right to basic energy supply, such as electricity and gas. It prohibits energy disconnections of households that are unable to pay their energy bills, unless the suppliers obtain proof from the local social services confirming households are not in vulnerable situations.

In France, since 2015, the objectives of the Energy Code (Law No 2015-992) include 'the right of access to energy for all households without excessive cost in relation to their resources' (Article L100-1), and a number of safeguards via regulation of energy companies.

1.4 Energy renovations for achieving affordable and sustainable housing in the European Union

The key European Green Deal initiative for achieving energy efficiency in the buildings sector through renovations – the Renovation Wave – should be implemented in a way that 'protects the right of everyone to have affordable, liveable, accessible and healthy housing' (p. 26). The Commission communication also highlights renovations 'as a lever to address energy poverty and access to healthy housing for all households' and stresses the need to address the energy efficiency of buildings together with their accessibility in line with the CRPD obligations of the EU and its Member States. Although the EU has adopted legislation to establish a framework for decarbonisation and energy renovations of buildings to achieve energy-efficient, sustainable and quality housing via renovations, and has acknowledged the need to safeguard access and affordability of housing in this context, no concrete guidelines and measures have been put in place to ensure such equal access to energy renovations.

The EED calls on Member States to implement energy efficiency obligations and measures as a priority among people affected by energy poverty, vulnerable customers, people in low-income households and, where applicable, people living in social housing. They must **also ensure that the measures implemented have no adverse effects on those** persons (Article 8(3)). However, some provisions run the risk of excluding people from access to energy renovations. The EED allows Member States to exempt social housing from the minimum energy performance obligations where renovations would not be cost-neutral or would lead to rent increases (Article 6(1)).

Although the intention was to protect low-income households, there is a risk that this provision may result in depriving people living in social housing from access to energy renovations. It is therefore important that these rules are implemented in a way that enables access to energy efficiency renovations for vulnerable customers and people living in social housing and protects them from disproportionate cost increases.

The need to implement renovations in line with the principles of leaving no one behind and a fair transition to climate neutrality is addressed in the EPBD. For example, Recital 64 highlights the need to target vulnerable households and protect them from the negative social impacts of renovation costs and to take measures to prevent evictions. Member States are also required to establish draft NBRPs, which were due by 31 December 2025, and to include indicators on empowering and protecting vulnerable customers and addressing energy poverty, including housing affordability (Article 9(4)).

Additionally, the Social Climate Fund Regulation establishes a legal and funding framework to ensure a socially fair transition specifically in the context of addressing the social impacts of the ETS-2 within the scope of the EU emissions trading system on vulnerable households, transport users and micro-enterprises. Member States had to submit draft SCPs by June 2025, with the first fund disbursements planned in 2026. The measures include investments intended to increase the energy efficiency of buildings, decarbonising the heating and cooling of buildings and direct income support (Article 3), in particular for vulnerable households and microenterprises, including for tenants and people living in social housing (Article 8(1)).

1.5 Conclusion

Fundamental rights are key to ensuring that the EU climate and energy transition is just. Access to affordable and sustainable energy and adequate housing are essential to the enjoyment of other rights, as recognised in both EU and international law. However, while energy renovations offer opportunities to improve living standards and address energy poverty, current policies often lack robust safeguards for vulnerable groups, risking further exclusion. A more systematic, rights-based approach is needed to ensure that energy transition measures do not inadvertently result in negative impacts on fundamental rights or deeper inequalities.

2. Fundamental rights in the European Union climate and energy governance

A human-rights-based approach requires explicit grounding in human rights – **upholding human rights obligations and principles at all stages of the development, implementation, monitoring and evaluation of climate policies**. The 2021 EU Charter strategy stresses the requirement for EU legislation and measures implemented at the Member State level to comply with the Charter. The FRA report Applying the Charter of the Fundamental Rights of the European Union in law and policymaking at national level provides guidance for assessing whether and to what extent the Charter applies to national law and policies [1].

The Governance Regulation is a key coordination instrument for the EU's energy transition. Under the regulation, Member States develop integrated NECPs and long-term strategies. The NECPs are the principal policy planning tool for achieving the EU's climate and energy targets and help to ensure that the EU's transition is socially just, provides energy security and ensures affordability. This Chapter analyses how fundamental rights are integrated into the EU Energy Union legislative framework and in NECPs.

2.1 Fundamental rights in the National Energy and Climate Plans

The Governance Regulation does not include an explicit reference to the Charter, but it must be implemented in compliance with it under Article 51(1) of the Charter. In Recital 45 the regulation reminds of the Paris Agreement Parties' commitment to their obligations on human rights and gender equality in addressing climate change.

> **Member States should therefore adequately integrate the dimensions of human rights and gender equality in their integrated national energy and climate plans and long-term strategies. Through their biennial progress reports they should report information on how the implementation of their integrated national energy and climate plans contributes to the promotion of both human rights and gender equality.**
>
> *Governance Regulation, Recital 45 (emphasis added).*

However, there is no guidance on how these should be integrated. Member States' NECPs should, to a feasible extent, report on 'the health, environmental, employment and education, skills and social impacts, including just transition aspects (in terms of costs and benefits as well as cost-effectiveness)' (Annex II). The Governance Regulation requires that Member States identify and address energy poverty, including through renovations. The regulation also refers to the Aarhus Convention (Recitals 28–29), highlighting the need for ensuring public participation and access to justice, and requires public participation in the preparation of NECPs (Article 10).

In its guidance for updated NECPs and its EU-wide assessment of the updated draft NECPs in 2023, the Commission has underscored the role of NECPs in achieving a socially just transition, and urged all Member States to point out in their NECPs the need to strengthen the protection of vulnerable consumers and households in the context of the EU-wide energy crisis.

Member States were due to submit their final updated NECPs by 30 June 2024. Most Member States submitted the NECPs with delay, and by May 2025 three Member States (Belgium, Estonia and Poland) were yet to submit their updated plans.

The Commission's EU-wide assessment of the final updated NECPs (2025) indicates that the submitted plans lack in-depth analysis of the social and employment impacts of a just transition, especially for vulnerable households and regions, but it does not explicitly refer to human rights or gender equality. FRA's analysis of the final NECPs shows that while most NECPs do not make explicit reference to 'rights', the majority of them contain references to equality and non-discrimination, vulnerable groups and access to affordable energy (see Table 2). However, these are often mentioned specifically in the context of energy poverty but not systematically integrated across all policy areas and measures outlined in NECPs. While all NECPs cover equal access to energy and to vulnerable customers, they usually do not identify specific needs or situations of vulnerability and lack details on implementation measures.

Table 2 – Mapping of selected fundamental rights aspects in national energy and climate plans

Member State	Fundamental/ human rights	Social rights	Equality and non-discrimination	Gender equality	Equal access to energy	Vulnerable customers	Affordable housing
AT	✘	✘	✘	✘	✔	✔	✘
BE	✔	✘	✔	✔	✔	✔	✔
BG	✘	✘	✔	✘	✔	✔	✘
CY	✘	✘	✔	✘	✔	✔	✘
CZ	✘	✘	✔	✔	✔	✔	✔
DE	✘	✘	✔	✘	✔	✔	✔
DK	✘	✘	✘	✘	✔	✔	✘

Member State	Fundamental/ human rights	Social rights	Equality and non-discrimination	Gender equality	Equal access to energy	Vulnerable customers	Affordable housing
EE	✘	✘	✔	✘	✔	✔	✘
EL	✘	✘	✔	✘	✔	✔	✘
ES	✘	✔	✔	✔	✔	✔	✘
FI	✔	✘	✔	✔	✔	✔	✔
FR	✘	✘	✔	✘	✔	✔	✘
HR	✘	✘	✔	✘	✔	✔	✔
HU	✘	✘	✘	✘	✔	✔	✘
IE	✘	✘	✔	✘	✔	✔	✔
IT	✔	✔	✔	✘	✔	✔	✘
LT	✘	✘	✔	✔	✔	✔	✘
LU	✘	✘	✘	✘	✔	✔	✔
LV	✘	✘	✔	✔	✔	✔	✘
MT	✘	✘	✔	✔	✔	✔	✘
NL	✘	✘	✔	✔	✔	✔	✘
PL	✘	✘	✘	✘	✔	✔	✘
PT	✘	✘	✔	✔	✔	✔	✘
RO	✔	✘	✘	✘	✔	✔	✘
SE	✘	✘	✘	✘	✔	✔	✘
SI	✘	✘	✔	✘	✔	✔	✘
SK	✘	✔	✘	✘	✔	✔	✔

Alternative text: The table summarises how EU Member States' National Energy and Climate Plans address selected fundamental rights aspects. For each plan, the table shows whether specific aspects—such as human rights, social rights, equality and non-discrimination, gender equality, protection for vulnerable groups, access to energy, and affordable housing—are included. A checkmark means the plan covers that aspect, while a cross means it does not.

Source: Own analysis of the NECPs (downloaded 12 May 2025), including the draft final plans from Belgium, Estonia and Poland, and the final plans from the remaining 24 Member States.

As shown in Table 2, only four plans (Belgium, Finland, Italy, Romania) explicitly mention fundamental and human rights in the context of a just transition and energy poverty, while social

rights are directly referenced in three plans (Spain, Slovakia and Italy). No updated NECP makes reference to the Charter. In the Belgian draft NECP, a just and inclusive transition is identified as a key aspect of the design and implementation of the plans' policies in Brussels Capital Region: 'Energy is not a good like another. This is a basic necessity, access to which is a fundamental right' (p.10). The Walloon Region's strategy stresses the need to ensure each measure in the plan is compatible with human rights and labour rights. Similarly, Finland refers to the human rights and gender impact assessment that was conducted in relation to its NECP (p. 215, see also Chapter 2.1.2)The Romanian NECP explicitly casts the reduction of energy poverty as a matter of human rights (p. 47). Similarly, the national energy and climate plans in Albania, North Macedonia and Serbia address the social aspects of the energy and climate transitions primarily through the lens of addressing energy poverty [2] .

2.1.1 Equality and non-discrimination in national energy and climate plans

References to equality can be found in the majority of the plans and emerge in three main contexts: unequal exposure to climate change, economic and distributional (in)equality and gender (in)equality.

The disparate impacts of climate change and climate transition measures are considered both in the context of geographical exposure and specific groups. The Croatian NECP directly refers to the principle of equal treatment as an underlying objective which needs to be realised 'when applying the NECP and considering the effects of its provisions' (p. 109). The Greek NECP stipulates 'ensuring equality, inclusion and non-discrimination' as one of the aims in the context of fair labour transition and addressing its socioeconomic consequences (p. 188). The Lithuanian NECP refers to the principle of 'equal opportunities for all' expressed in the Lithuanian cross-cutting strategy until 2030 (National Progress Plan), which 'ensures that all persons, regardless of their sex, nationality, racial or ethnic origin, nationality, language, religion, beliefs, beliefs or opinions, disability, state of health, social status, age, sexual orientation or other characteristics, have equal rights and access to services, facilities, transport and other means to participate in public life' (pp. 130–131). It stresses the need to analyse and integrate this principle in climate governance. Other NECPs do not explicitly refer to the principle of equal treatment in the context of NECP implementation (though some mention it, such as in the context of access to energy).

Many NECPs include some consideration of socioeconomic inequalities and distributional aspects of climate transition policies. For example, the Irish NECP stresses that some regions and households are more vulnerable than others to the effects of both climate change and decarbonisation, and highlights that the cost of transition should be shared in a way that does not exacerbate existing inequalities (p. 222). It also notes the potential for climate action to enhance social equality (p. 409). The Dutch NECP also acknowledges the risk of negative distributive impacts of climate policies on social inequalities (p. 11). The Portuguese NECP states that the cross-cutting foci of the plan include 'people first: a better demographic balance, more inclusion, less inequality' (p. 32). The Slovenian NECP also highlights the need to ensure the fair distribution

of costs and benefits of transition, and the need for 'designing and implementing other policies that contribute to reducing levels of inequalities in society' to ensure a just transition (p. 5).

2.1.2 Gender equality

Climate change itself, and mitigation or adaptation measures adopted to tackle it, have the potential to exacerbate existing gender inequalities. The European Institute for Gender Equality's Gender Inequality Index analysis has shown that in the 2019 NECP draft submissions, only 10 NECPs referred to gender equality, and only did so partially and superficially. FRA's analysis of the updated NECPs submitted in 2024 and 2025 shows that three Member States have removed all references to gender and only nine Member States refer to gender equality (see Table 2), and even these references remain mostly superficial. More detailed and nuanced research is needed. For example, the Finnish gender impact assessment covers six sectors: energy production, construction and buildings, transportation, industry, the service sector and agriculture. It stresses that increasing the inclusion of women and young people in climate policies, who are more prepared to make and support climate-friendly decisions, would contribute to higher emission reductions. The Spanish NECP highlights gender equality as a key cross-cutting factor in the climate transition and outlines that the Spanish gender equality strategy [3] 'integrate[s] ecological and social sustainability from an intersectional gender approach' (p. 355). The Latvian and Lithuanian NECPs highlight the gender dimension of climate change impacts and gender inequality in climate governance. For example, in Lithuania, 'in 2022, only 29 % of decision-makers in parliamentary committees focusing on the environment and climate change were women' (p. 14).

2.1.3 Vulnerability and equal access to energy

NECPs often define vulnerable households as energy consumers who are unable to afford their energy costs, although this varies between Member States. The Luxembourgish NECP defines low-income households with high energy consumption as vulnerable. However, in some NECPs, the definition of vulnerable households is developed further. The Irish, Italian, Lithuanian and Maltese NECPs, emphasise specific groups with potential health vulnerabilities who are at greater risk of experiencing undue harm from the detriments of energy poverty. Both the Italian and the Irish NECPs make explicit reference to vulnerable households, including people with serious health conditions, who depend on the use of energy-powered medical and therapeutic equipment necessary for their survival. The Dutch and Latvian NECPs include those experiencing transport poverty as vulnerable groups. The Latvian NECP also identifies those with a low-level of education and women as vulnerable and at risk of poverty. Single parent families are categorised as vulnerable in the Lithuanian, Romanian and Swedish NECPs. In the Italian NECP, the definition of vulnerable households also includes the inhabitants of small islands and residents in emergency housing facilities.

Whether framed strictly as energy consumers or within nuanced categories as listed above, all NECPs frame priorities for vulnerable groups in the context of energy poverty, identifying communities that have inadequate access to basic energy services. As such, NECPs include strategies tackling energy poverty through affordable energy renovations, financial support and awareness raising.

2.1.4 Access to affordable housing

While every NECP refers to equal access to energy, only seven plans mention affordable housing, despite the close link between energy poverty and housing (see Chapter 1.4). The Irish NECP highlights the 'Housing for All' plan, Ireland's national housing plan aimed at delivering an average of 6 000 affordable homes per year for people of all needs. Croatia's NECP lists 'facilitating access to affordable housing' as one of the measures to be financed from the Social Climate Fund. The German NECP emphasises the need to be attentive to the social aspects of the just transition, including the need to guarantee affordable housing for everyone. Similarly, in Luxembourg's NECP, there is a recognition that rising housing prices are limiting low-income population groups to poorly maintained housing, encouraging the construction of affordable housing. The Czech NECP outlines the country's long-term vision of a secure, affordable and sustainable supply of households and energy. Plans which do not make direct reference to affordable housing use the concept of affordable energy when outlining housing strategies that typically come in the form of renovation and energy upgrades, subsidies supporting those in financial need and building new housing stock. Housing is mainly considered within the context of decarbonisation and energy efficiency targets. Housing renovations are also a way of guaranteeing a home of an adequate standard that supports the needs of its inhabitants (see Chapter 1.4). This is reflected in several NECPs, which mention empowering and creating climate-resilient households in their housing strategies. The State Housing Plan referred to in the Spanish NECP has the goal of, among other things, facilitating the availability of decent and adequate housing for older people and people with disabilities. The French NECP refers to France Rénov', a public service housing initiative, which was established to, inter alia, inform and empower households throughout the renovation process and to help address injustice that can potentially be caused in the decarbonisation process.

2.2 National Energy and Climate Progress Reports

Member States are required to report on the implementation of the NECPs (Article 17) in biennial progress reports starting in March 2023 for a 10-year period. The Commission Implementing Regulation sets out a basic framework for NECPRs, including on energy poverty and just transition (Article 15). Member States may also voluntarily report on how its NECP implementation 'contributes to just transition, the promotion of both human rights and gender equality and addresses inequalities in energy poverty', including their obligation to prevent the foreseeable

adverse effects of climate change, and remedy and adaptation means available to those affected (Annex XX of the Commission Implementing Regulation, see also Chapter 5.2).

The Commission has published its assessment of the first round of progress reports submitted by Member States in 2023 under Article 17 of the Governance Regulation. The Commission stressed that 'it is crucial to monitor and evaluate the effectiveness of these measures in promoting human rights and gender equality to assess EU commitments to ensure a more sustainable, just, and socially inclusive future for all'.

In the 2023 reporting, 16 Member States provided information on voluntary indicators on just transition, human rights, gender equality and inequality in energy poverty, as per Annex XX of the Governance Regulation. Out of those reports, human rights are only explicitly mentioned in five, all of which recognise the impact of climate change on human rights. However, these mentions are rather superficial, without explaining how these impacts are assessed and addressed in climate and energy policies. Member States were due to submit the subsequent NECPRs by 15 March 2025. At the time of drafting (May 2025), only six NECPRs have been fully published in the Commission repository.

2.3 Conclusion

The EU's climate and energy governance framework set out in the Governance Regulation calls for integrating human rights, gender equality and social considerations into national energy and climate plans. While most Member States refer to vulnerable groups and equal access to energy in their plans, explicit references to fundamental rights remain sporadic and superficial. There is a clear need for more robust guidance and systematic implementation to ensure that policies do not just mention these principles but actively address the rights and needs of those most affected by the climate and energy transition.

3. Non-discrimination and leaving no one behind in the energy transition

Non-discrimination and attention to persons in vulnerable situations are core principles of a HRBA. Non-discrimination is a fundamental right and a general principle of EU law (Article 18 and 19 TFEU, Article 21 of the Charter), underpinning EU law and policies – including in the energy and climate areas. Linked to it is the principle of 'leaving no one behind', which has been integrated into key EU climate and sustainability policies and underpins the European Green Deal and the fit for 55 package. It emphasises a 'just transition' to achieving net-zero greenhouse gas emissions by 2050 in a fair and inclusive manner, ensuring that vulnerable groups and regions are not disproportionately affected by the climate transition.

The energy and building renovation projects selected for this research are major programmes – often co-funded by the EU – contributing to reaching the climate targets in the respective countries. Many are complex with different strands, subprogrammes and changes in subsequent funding rounds (see Table 4). For example, in Belgium and Czechia there are several subprogrammes providing different types of support for energy renovations. The selected programmes are often not the only available measures, and other programmes may exist which cover different groups or beneficiaries. For example, in France the researched MaPrimeRénov' programme does not cover social housing stock, although there is a separate programme to support renovations for tenants in social housing (éco-PLS), which was not included in the present research.

Chapters 3–5 mainly present findings of the in-depth research. The methodology is described in more detail in Annex 1.

Table 3 – Projects selected for in-depth fieldwork July – November 2024*

Country	**Project name**	**Project description**
Belgium	Zero interest loans (Rénopacks)	The programme provides zero interest loans for renovations to middle- and low-income families who own houses in Wallonia, to reduce energy costs, increase safety or adapt the house for disabilities.
Czechia	New Green to Savings (Nová zelená úsporám)	The project provides subsidies for renovation of detached houses and multi-apartment buildings to reduce their energy consumption. The programme also encourages climate adaptation measures, such as rainwater collection, wastewater reuse and green roof installations.
Estonia	Reconstruction grants 2022–2027	The project finances both the complete reconstruction of apartment buildings and, for individual apartments, the replacement of heating devices using renewable energy sources, or the connection of apartment buildings to a district heating network.

France	Energy efficiency bonus (MaPrimeRénov')	The project provides subsidies to owners to support energy renovations including building insulation, heating, ventilation or energy audit work on detached houses or apartment buildings.
Germany	CO_2 pricing for heat and transport	In 2021, the German Federal Government introduced carbon pricing for the emissions of transport, buildings and heating sectors. The government has also introduced specific direct measures to reduce cost burdens for households.
Greece	Energy savings in building renovations (Exoikonomo 2023)	Exoikonomo provides subsidies for renovations and energy efficiency upgrades of housing.
Poland	Clean Air Programme	The first nationwide programme to subsidise the replacement of old heating stoves with clean energy sources and the insulation of single-family homes.
Romania	Photovoltaic Green House 2023	The project provides individuals with grants to purchase and install photovoltaic panel systems for energy self-consumption and with the possibility of giving surplus electricity to the national energy system.
Spain	Energy poverty (Technical assistance to local authorities)	The case study explored the technical assistance to energy poverty reduction initiatives provided under the EU Energy Poverty Advisory Hub in selected localities in Spain.
Sweden	Public housing climate initiative (Allmännyttans Klimatinitiativ)	This is a voluntary initiative of public housing companies in Sweden, aimed at reducing greenhouse gas emissions through installations for efficient and climate-smart energy systems, awareness campaigns for water and energy saving and other climate-smart solutions.

NB: Programmes reviewed in Germany, Sweden and Spain do not list households as beneficiaries and therefore are not included in renovation-specific comparisons, unless relevant information was identified. *Some of the programmes have undergone changes since the end of fieldwork which cannot be captured in this report.

In seven Member States, the selected projects and programmes provided funding for energy and building renovations to improve energy efficiency. In Spain the project explored local capacity building to address energy poverty, in Sweden the project involved a large coordination initiative on energy efficiency in public housing and in Germany the focus was on the CO_2 tax and related relief measures.

The projects were analysed through a fundamental rights lens, exploring the following dimensions:

- target groups: eligibility, impact, safeguards, gaps;

- accessibility: equality and non-discrimination, barriers, gaps;
- information and communication, including public perception and social acceptability;
- stakeholder engagement and participation;
- governance and accountability;
- monitoring, data collection; and
- overall assessment, promising practices and ways forward.

This chapter presents findings from FRA's research regarding the equal access to energy renovations and support measures (Chapter 3.1). It further focuses on how vulnerable groups and situations of vulnerability are defined and addressed in the programmes, also specifically in the context of energy poverty (Chapter 3.2).

3.1 Equal access to renovation and energy transition measures

The revised EED (Directive (EU) 2023/1791), referring to the EU's social objectives (Article 9 TFEU), highlights that the EU's energy efficiency policies should be inclusive and should therefore ensure equal access to energy efficiency measures for all consumers affected by energy poverty (Recital 76), and stresses that:

> **Member States should empower and protect all people equally, irrespective of sex, gender, age, disability, race or ethnic origin, sexual orientation, religion or belief, and ensure that those most affected, those put at greater risk of being affected by energy poverty, or those most exposed to the adverse impacts of energy poverty are adequately protected. In addition, Member States should ensure that energy efficiency measures do not exacerbate any existing inequalities, in particular with respect to energy poverty.**
>
> *Revised Energy Efficiency Directive, Recital 125.*

A recent policy report of SGI Europestresses that the affordability of energy during transition requires careful policy design. It calls on the Commission to improve affordability and inclusion in energy and housing, and to strengthen the obligation for Member States to implement and finance energy efficiency improvement measures as a priority among vulnerable customers and

people affected by energy poverty.

Legal corner – Non-discrimination and the right to affordable and accessible housing in the context of energy renovations

The right to housing is recognised under international human rights law, and aspects of it are protected under EU law (see Chapter 1). Article 19 TFEU empowers the EU to take action to combat discrimination. The Racial Equality Directive (2000/43/EC) prohibits direct and indirect discrimination based on racial or ethnic origin in, inter alia, the areas of access to and supply of goods and services which are available to the public, including housing (Article 3).

The right to housing under international human rights law is an explicit element of the right to an adequate standard of living, and includes standards of affordability, habitability, location, accessibility, availability of services, security of tenure and cultural adequacy (Article 11 ICESCR, UN Committee for Economic, Social, and Cultural Rights, general comments No 4 (1991) and No 7 (1997)). A self-standing right to housing is enshrined in the revised ESC (Article 31). Adequate housing is also an explicit element of the right of persons with disabilities to an adequate standard of living and social protection as enshrined in Article28 of the CRPD, and is necessary to guarantee the right to living independently and being included in a community under Article 19 CRPD. Access to housing should also be ensured in the context of the right of persons with disabilities to independence, social integration and participation in the life of the community as provided for in Article 15 paragraph 3 of the revised ESC. As the CRPD Committee highlights:

> *Accessible housing providing accommodation to persons with disabilities, whether they live alone or as a part of a family, must be available in sufficient number, within all areas of the community, to provide the right of persons with disabilities to choose and the possibility to do so. To this end,* ***barrier-free new residential construction and the barrier-free retrofitting of existing residential structures are required****. In addition, housing must be affordable to persons with disabilities.*
>
> *CRPD Committee, General Comment No 5, paragraph 34.*

Furthermore, provision of housing suited to elderly persons' needs and their state of health or of adequate support for adapting their housing is also an element of the right of elderly persons to social protection to enable their independent living (Article 23 ESC). The Convention on the Rights of the Child in Article 27 also highlights housing in the context of children's rights to an adequate standard of living and the related obligations of States Parties.

Ensuring equal access to renovation programmes and energy transition measures requires taking into account the specific needs of different groups at different stages of the programme's design,

implementation and monitoring. Barriers or exclusion criteria to access such renovation and energy transition measures deprive individuals of their right to adequate housing and hinder them accessing affordable and sustainable energy.

FRA's research explored how equal access is guaranteed and implemented regarding target groups, eligibility and access criteria, financing rules and other specific design elements of the renovation programmes and related energy transition measures.

3.1.1 Target groups and access criteria

Access criteria for energy renovations focus primarily on technical aspects, such as type, status and age of the building, energy source or type of heating devices, without considering the specific needs of different types of households or neighbourhoods.

Most projects do not have safeguards in place to ensure that those in situations of vulnerability (e.g. single parent households, older people, people with disabilities, people with a migrant background) can equally participate (see Chapter 3.2). Often barriers accumulate. For example, houses occupied by low-income owners in rural areas without access to district heating – and in need of energy-efficient refurbishment – may lack financial means to insulate and replace their heating systems. In combination with a lack of targeted outreach and awareness raising, in practice many of these measures remain inaccessible for entire population groups (see Chapter 4.2). Furthermore, inhabitants in irregular housing or living in informal settlements cannot access the programmes at all.

> **[In the context of assistance for persons in a situation of vulnerability]: You can't compare someone from a vulnerable, illiterate community with someone in central Bucharest who owns a villa, has a higher education, and a monthly income of 5 000 euros.**
>
> *Romania, civil society.*

Table 4 – Programmes' focus, target groups and specific support of groups or safeguards			
	Programme focus	Target groups	Support to specific groups
BE	Housing renovation	Owners between the ages of 18–76 (in houses that are a minimum of 15 years old with the exception of disability adaptations)	Low-income households, people with disabilities
CZ	Housing renovation	Houseowners	Families with children, students
EE	Housing renovation	Apartment associations	None
FR	Housing renovation	Houseowners	Assistance for vulnerable groups
DE	CO_2 pricing	All users of heating and transport	Tax reliefs, housing allowance
EL	Housing renovation	Houseowners	Low-income households, vulnerable groups, young people
PL	Replacement of fossil fuel heating systems and renovation	Houseowners of single-family houses	Low-income households
RO	Installing photovoltaic systems	Houseowners and religious institutions	None
ES	Tackling energy poverty	People in energy poverty	Low-income households
SE	Energy efficiency and sustainability in public housing	Public housing residents (indirectly, via public housing companies)	None

Source: FRA, Franet country reports (2024).

Some of the energy renovation programmes target specific groups (low- and middle-income groups, families), and some provide additional support or have specific strands to support low-

income households and other vulnerable groups (see Table 4) – but these are always limited to houseowners. The subsidy level often depends on income, with low-income households entitled to greater support. There are very few dedicated measures addressing specific vulnerabilities. One example is France which provides a tax credit for the expenses of equipment designed for older people or people with disabilities. Programmes in Belgium and Estonia also include some dedicated support for people with disabilities (see Chapter 5.1).

There are concerns in Member States about the exclusion of older people from the benefit scheme, along with energy poverty among older people not being properly addressed. For example, the Rénopack programme in Belgium targets property owners with lower incomes, but it sets an upper age limit of 76 years for applicants, thereby excluding older people from participating.

FRA's research confirmed that most renovation and energy efficiency programmes frequently exclude tenants, and they usually have no structured approach or safeguards to direct or tailor support to different applicants, including to people in vulnerable situations. Tenants may potentially benefit from the Climate Initiative in Sweden, which targets public housing, however vulnerable groups or tenants in vulnerable situations are not specifically addressed in the programme. The climate initiative is based on collaboration and the active exchange of experiences between Swedish public housing companies (Sveriges allmännytta).

3.1.2 Tenure status and renovations: exclusion of tenants

People with lower incomes are more likely to live in energy-inefficient housing – often of a lower standard – and experience or be at risk of energy poverty (see Chapter 3.2). Over 50 %of people with lower incomes live in rental housing, compared to 30 % for the entire EU population (see Policy context – Owning or renting in the EU).

At the same time, most programmes for the energy-efficient renovation of houses are open only to owners. As outlined in Table 4, they typically exclude tenants – who are often from the lower-income population groups – and lack sufficient safeguards to protect their rights. While tenants could benefit from renovations carried out by property owners, in practice the 'split incentives' dilemma is an oft-cited barrier in the context of energy renovations. It refers to the common situation where neither tenants nor landlords are incentivised to invest in energy efficiency improvements: tenants may not have the rights, resources and incentive to make major changes to the property they do not own, while landlords in turn do not invest in energy renovations as energy bills are paid by tenants.

Excluding tenants from energy renovation programmes – and a low uptake of energy renovations in rental properties – limits their access to affordable and sustainable energy and the right to adequate housing, and potentially violates the principle of non-discrimination.

At the same time, if renovations of rental houses are conducted, effective safeguards are needed.

Renovations tend to drive property value increases and thus rental prices, which may have an adverse impact on tenants and access to affordable housing. If not addressed, this may create the risk of 'renovictions' – evictions due to sudden rent price increases resulting from housing renovations – and gentrification. This may undermine the efforts to effectively address energy poverty via renovations, as people in vulnerable situations and with lower incomes will be driven out of renovated houses to ones of lower standard (Grossman, 2019).

Promising practice – Promoting rent stability in renovations via landlord incentives

The 'Solidary Landlords' project (*bailleur solidaire*) offers landlords a zero-interest loan to renovate the property they rent and, in return, commit to placing the property under the management of a social real estate agency without raising the rent. The measure incentivises energy renovations of rental houses while including protection for tenants.

Source: Fonds du Logement de Wallonie ; based on Franet Belgium Country Report (2024).

The rate of energy-efficient refurbishments of buildings has been below 1 % for years in Germany. About half of all residential households still heat their homes with gas and one third do so with oil. The interviews in Germany underscore that the level of energy consumption depends to a small extent on people's behaviour, and to a much larger extent on the energy efficiency state of buildings. In 2024, more than half of Germany's population (52.8 %) lived in rented accommodation. This was the highest share in the EU.

Policy context – Owning or renting in the EU

In the EU in 2023, 69 % of the population were part of a household that owned their home, while the remaining 31 % lived in rented housing. The highest shares of ownership were observed in Romania (95 %), Slovakia (93 %), Croatia (91 %) and Hungary (92 %). In all Member States, except Germany, owning was more common. In Germany, 53 % of the population in 2021 were tenants, followed by Austria (46 %) and Denmark (41 %).

On average, in 2019, tenants across the EU spent 31 % of their income on housing costs – compared to 16 % for homeowners. For households with lower incomes (earning below 60 % of the median national household income), this number amounted to 39 %. 34 % of tenants in private housing and 31 % of tenants in social housing also reported poor insulation and/or energy efficiency in their accommodation as problematic, compared to 21 % of homeowners.

Source: Eurostat, 'House or flat – owning or renting', 2025; Eurofound, Unaffordable and inadequate housing in Europe, 2023.

In Belgium, Czechia, Estonia, France, Greece, Poland and Romania, only owners of the property are entitled to access the respective programmes. In Estonia, the programme targets multi-apartment buildings via apartment associations, which only include homeowners. The MaPrimeRénov' programme in France focuses only on homeowners, but there are dedicated energy-saving subsidies for tenants, for example via MaPrimeAdapt' (not included in this research).

3.1.3 Support measures essential for ensuring equal access to the programmes in practice

The technical and procedural complexity of the selected energy renovation programmes, the inaccessible and often digital-only application processes, the technical language and complex requirements often pose challenges to applicants, preventing them from equal access to clean and sustainable energy and energy-efficient housing. This Chapter analyses how equal access is safeguarded and enabled in practice in the implementing programmes in the 10 Member States through specific support mechanisms.

Advisors, local information networks and one-stop-shops are crucial in providing equal access to energy renovation and supporting applicants, also in the context of digitalising services, particularly for people in vulnerable situations. Consultants or representatives in local communities can provide personalised guidance, translate key information into simplified and accessible language, and hold informational sessions to raise awareness among specific target communities and help to remove barriers to accessing the programmes. While most programmes include some support mechanisms to inform and support potential beneficiaries, gaps remain, as these mechanisms are not always comprehensive and sometimes are under resourced and unable to provide support in a timely manner. The programmes in Poland and Romania did not have dedicated support mechanisms at all (Table 5).

Table 5 – Local or regional consultants established by the programme	
Member State	**Local or regional consultants or support organisations established by the programme**
Belgium	Energy Counters / *Guichets Énergie* and local Energy Renovation Platforms
Czechia	Energy Advisory Service / Mobile Energy Advisory Service
Estonia	Regional consultants
France	Local advice centres, mobile outreach initiatives with local information points
Germany	n/a
Greece	Technical consultants
Poland	None (until 2025)
Romania	None
Spain	Energy one-stop-shops
Sweden	n/a

n/a = not applicable
Source: FRA, based on Franet (2024) country reports.

Application processes can further exclude. For example, the Romanian Photovoltaic Green House programme uses the 'first come, first served' digital-only application process, which favours individuals with strong digital skills and the technical knowledge to apply quickly. In several countries, interviewees highlighted that information and application processes are drafted in technical jargon, and it may be difficult for potential applicants to understand and navigate through the wide range of different and often complex programme packages.

The information and application process for the programme in Belgium is primarily available online, making it hard for individuals with certain disabilities or those with low digital skills or no digital access to access information about the programme. However, to support applicants, the executive agency for Rénopack, the Société Wallonne Sociale de Crédit Social, offers a toll-free hotline or energy counters and local energy renovation platforms (such as Liège Énergie and the CPAS of Charleroi) to assist citizens through administrative, technical and financial support.

Promising practice – Energy counters (Guichets Énergie) in Belgium

Energy counters provide information to visiting people about renovations, the

loans and the procedures. There are currently 16 energy counters distributed across the Walloon Region and a team of 40 consultants ready to assist citizens with energy-related matters for their homes. They offer free, personalised advice on home energy matters, including the Rénopack. They also provide guidance on sustainable practices, renovation projects, regulations and energy aid.

Source: Wallonia énergie SPW.

In Czechia, the Energy Advisory Service and local action groups communicate about the programme and provide free consultancy services to low-income applicants and assist them in completing applications for the New Green to Savings Light programme. However, as reported by interviewed stakeholders, these organisations are often overloaded with work, which limits their availability to provide support in a timely manner.

Technical consultants play crucial roles in the application process and implementation of programmes. Involvement of technical consultants in the renovation process has been mandatory in Estonia since 2023 (see Promising practice – Technical consultants providing mandatory application support in Estonia). Technical advisors also play a significant role in Greece, providing information on Exoikonomo's specifications and disseminating information about the programme and consumer loans. In France, MaPrimeRénov' advisors may be contacted via a dedicated national telephone number.

Promising practice – Technical consultants providing mandatory application support in Estonia

A 2023 resolution introduced mandatory support from technical consultants providing specialised expertise and guidance in the application process of the KredEx programme. This kind of outreach has been shown to increase the programme's accessibility and the awareness of the programme's availability among the population. As the programme was also implemented in a predominantly Russian-speaking region of the country, programme information became available in Estonian, English and Russian. Regional technical consultants were put in place to assist applicants with lower digital skills in the primarily digital application process.

Source: Resolution of the Minister of Economy and Infrastructure (11 March 2023); KredEx; based on Franet, Estonia country report (2024).

The energy one-stop shops [4] in Spain provide technical assistance to municipalities under the EU Energy Poverty Advisory Hub (EPAH). One-stop-shops exist also in France as one of the several channels to access information (see Promising practice: One-stop shops in France).

Promising practice: One-stop shops in France

As part of France MaPrimeRénov', 450 one-stop shops (Espaces Conseil France Rénov) that provide information and advice on renovations have been set up across the country. The one-stop shops were strategically set up in central information points in village and town squares in order to reach as many people as possible, offering free and personalised advice on the technical, administrative and financial aspects of the renovations.

Source: MaPrimeRénov'; based on Franet France country report (2024).

In Germany, in the context of the carbon tax, consumers can consult advisory services, provided by consumer associations (*Verbraucherzentralen*) and the German Tenants' Association (Deutscher Mieterbund). Citizens can also contact the Federal Ministry for Economic Affairs and Climate Action (Bundesministerium für Wirtschaft und Klimaschutz) or the German Environment Agency (Umweltbundesamt) directly.

3.1.4 Funding is necessary to ensure access for people with lower incomes

A key aspect determining the overall accessibility of renovation programmes is the **availability of funding and access to finance**, such as loans and subsidies for reconstruction to become energy efficient. However, funding rules, including the level of co-financing or upfront payments or required guarantee, may in practice exclude those who are financially vulnerable. While some programmes foresee measures addressing such situations (e.g. low-rate loans, or state guarantees), access to them is often restrictive in practice due to the associated administrative requirements.

Policy context – Unequal access to financial services as an obstacle to participation in energy renovation programmes

The 2014 Directive on payment accounts gives people in the EU the right to a basic payment account regardless of a person's place of residence or financial situation. According to 2021 World Bank Group data, in most Member States over 95 % of the population hold an account with a financial institution – with rates below 90 % only in Hungary (88 %), Bulgaria (84 %) and Romania (69 %). In comparison, FRA data from 2021 show that more than half of the Roma population (56 %) in 10 eastern and southern European countries do not have access to a bank account.

Source: European Commission (2024), Report on access to essential services in

the EU; FRA.

Co-financing of renovations exists in Czechia: the New Green to Savings programme requires 50 % co-financing from the beneficiaries. However, an additional programme strand, the New Green to Savings Light introduces an upfront subsidy of up to 100 % of the direct implementation costs for specific categories of households, including low-income households with retirement pensions or third-degree disability pensions, along with households receiving housing or child benefits. A similar approach exists in Poland, where the Clean Air programme requires 50 % of the investment's co-financing and low-income households are eligible for higher support. However, interviewees highlighted that the income criteria to access 100 % funding are highly restrictive.

> **If you look at a vulnerable household, I don't know to what extent they will have any money to finance and pay for these renovations. Vulnerable households are always vulnerable. I don't know how someone would suddenly 'generate' money to invest in frame windows or anything else. It's very, very difficult, especially when someone is facing an objective survival issue, like making a living.**
>
> *Greece, expert.*

In Greece up to 75 % of total costs are covered, depending on income. The Exoikonomo programme also provides a prioritisation weighting scheme for low-income and other vulnerable households. However, the applicant receives only 70 % of the approved grant amount credited to their bank account, while the rest of the payment is paid within 60 days of the certified completion of the work. The required down payment of renovation costs is a major obstacle for low-income households. Also, despite the availability of subsidies and interest-free loans, practical access to loans is often limited.

> **[I]n this programme, the banks, although they are required to, did not provide loans to low-income households as outlined in the programme guidelines.**
>
> *Greece, public entity.*

In France, MaPrimeRénov' support allows individuals to apply for a direct financial subsidy before starting renovation works, which can finance up to 90 % of the cost of the work for an isolated renovation act. A personal contribution of RON 2000 (approximately EUR 400) for solar panel installations establishes a major barrier for many applicants in Romania.

Promising practice – Offering state loans and guarantees for groups living in disadvantaged areas in Estonia

In Estonia, KredEx, a foundation set up by the Ministry of Economic Affairs, offers loans and financial guarantees with a priority to rural and economically disadvantaged areas where property values are low. It therefore supports economically disadvantaged groups in overcoming financial barriers when commercial banks are unwilling to provide credit, providing support when the association members may not qualify for bank loans or have the necessary funds for accessing the 'Reconstruction grants 2022–2027' project.

Source: Kredex; based on Franet Estonia country report (2024).

The Belgium programme includes tailored and individual support to reach out to applicants who need specific support (see Promising practice – Technical advice for vulnerable households in Belgium).

Promising practice – Technical advice for vulnerable households in Belgium

The Rénopack programme in Wallonia offers, besides loans and premiums for renovations, technical support to vulnerable households, helping them prioritise renovation tasks based on their financial situation, and ensuring their projects meet the criteria to qualify for premiums. The programme involves a preliminary analysis of contractors' estimates to maximise energy savings and eligibility for premiums, protecting households from funding renovations that do not meet technical standards. The level of support is tailored to the specific needs of each household, ensuring flexibility and effectiveness.

Source: Rénopack programme; based on Franet Belgium country report (2024).

Research shows that access to funds to implement energy efficiency measures is often limited. A variety of tools and mechanisms are required to ensure that everyone can benefit from the energy

transition programmes available.

3.2 Energy poverty and attention to people in situations of vulnerability

Energy poverty is a complex phenomenon, related to a lack of access to affordable energy, inefficient and poorly insulated buildings, and living in or being at risk of poverty in general. The EU recognises the need to address energy poverty (see Chapter 1) and obliges Member States to protect certain categories of people in situations of vulnerability in climate and energy legislation. As highlighted in the European Commission 2024 Report on access to essential services in the EU, access to energy is key to ensuring people's health and a decent standard of living. It calls on Member States to finance energy efficiency improvement measures as a priority among vulnerable customers and people affected by energy poverty.

Legal corner – Persons in situations of vulnerability – EU definitions

The EU energy legislation includes measures to protect certain categories of persons in situations of vulnerability, and in the context of specific laws sets out non-exhaustive criteria. There are three definitions which Member States may rely on to define categories of vulnerability in the energy policy context at the national level.

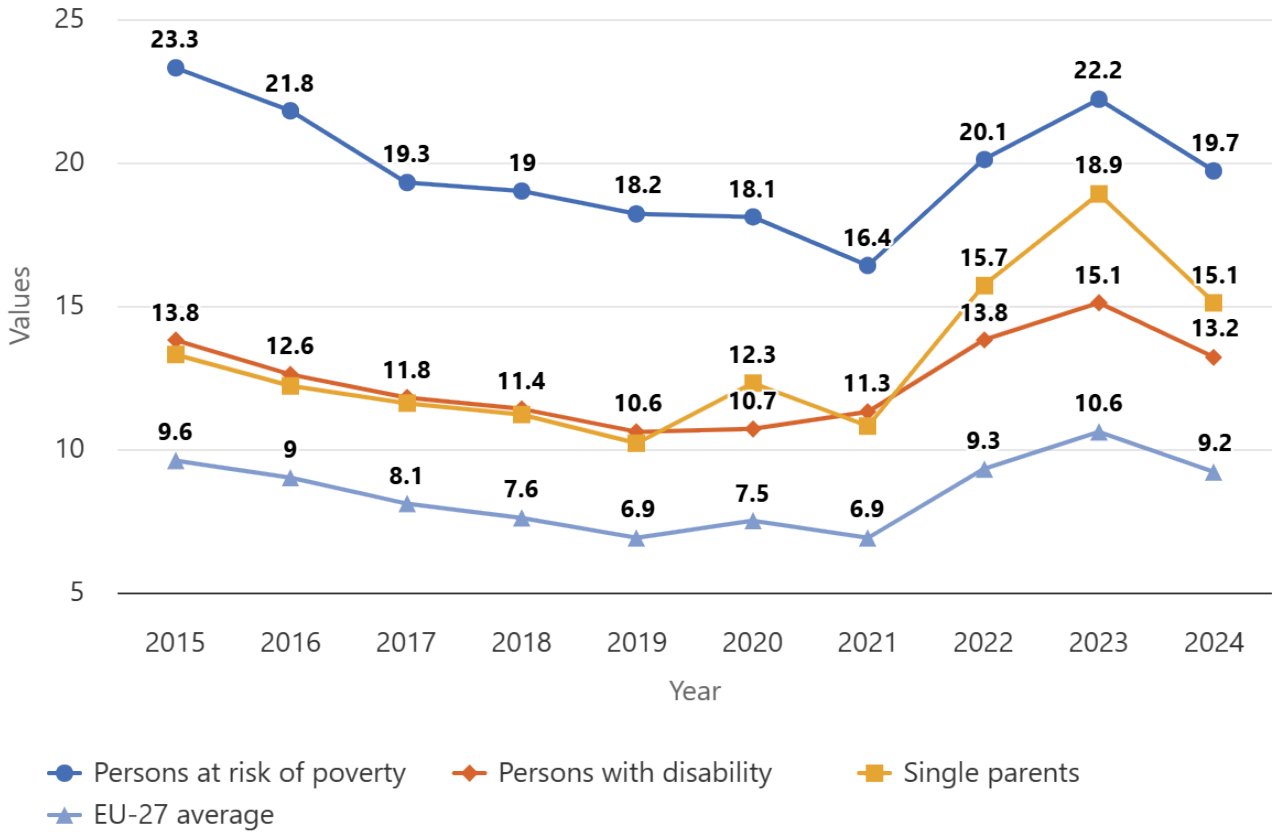
1. "Vulnerable households' means households in energy poverty or households, including low income and lower middle-income ones, that are significantly affected by the price impacts of the inclusion of greenhouse gas emissions from buildings within the scope of Directive 2003/87/EC and lack the means to renovate the building they occupy' (Article2(10) SCFR).
2. "Vulnerable households' means households in energy poverty or households, including lower middle-income households, that are particularly exposed to high energy costs and that lack the means to renovate the building that they occupy' (Article2(28) EPBD).
3. '[The definition of] 'vulnerable customers' may refer to energy poverty and, inter alia, to the prohibition of disconnection of electricity to such customers in critical times. The concept of vulnerable customers may include income levels, the share of energy expenditure of disposable income, the energy efficiency of homes, critical dependence on electrical equipment for health reasons, age or other criteria' (Article28 of the Electricity Market Directive– also used in the Gas Directive).

3.2.1 Risks and prevalence of energy poverty in the European Union

Energy poverty undermines the effective exercise of fundamental rights for those affected by it. Several indicators have been developed to measure energy poverty, with the 'inability to keep the home adequately warm' often used as the main proxy. In 2024, 9.2 % of Europeans were unable to keep their homes adequately warm, a sharp increase from 6.9 % in 2021 due to soaring energy prices and the cost-of-living crisis. According to JRC estimates, this number could be even higher, as at least 40 % of the EU population (around 180 million people in Europe) falls under at least one energy poverty indicator.

The highest risk is for people with low income (19.7 %), single parent households (15.1 %) and people with disabilities (13.2 %). These gaps persist over time: for example, single parents have been disproportionally hit by the price increases between 10.8 % in 2021 and 18.9 % in 2023 (Figure 1). According to the 2023 Gender Equality Index, women have on average a higher risk of experiencing energy poverty, particularly among those aged 65 and above and those with a disability. As highlighted in Chapter 1 of the FRA Fundamental Rights Report 2024, Roma and Travellers, migrants and descendants of migrants are also disproportionately affected by energy poverty.

Figure 1 – Energy poverty: Population unable to keep home adequately warm, in %



The figure shows the percentage of the EU population unable to keep their home adequately warm between 2015 and 2024, highlighting increased energy poverty among low-income households, single parents, and persons with disabilities.

Source: FRA based on Statistics for the European Green Deal, Eurostat database [ilc_mdes01]; [hlth_dhc140]

At the same time, energy poverty is often one of many dimensions of poverty and deprivation and may intersect with different categories or situations of vulnerability. People in the same household may experience energy poverty differently. For example, a house that is too cold (or too hot in winter) may disproportionately negatively affect children, older people or people with specific health issues. Energy poverty can be hidden – when people use less energy than they would need to meet their basic needs [5] .

The risk of energy poverty is often compounded by other related risks, also in the context of climate change. This includes, for example, heatwave exposure and summer energy poverty, and the related health risks and socioeconomic impacts. In its guidelines on Member States' adaptation strategies and plans, the Commission identified people in and at risk of poverty and social exclusion, people with disabilities, elderly people, people with pre-existing health conditions, pregnant women, displaced people, socially marginalised people, exposed workers and children as among those at the highest risk of experiencing energy poverty.

Often, these individuals may also be negatively affected by ill-designed transition measures which can inflict social and economic costs and exacerbate existing inequalities. Minority groups, such as Roma, indigenous peoples, recent migrants, people unhoused or in irregular housing (e.g. living in shanty towns, without a formal contract, etc.) are often beyond the reach of the standard energy transition programmes, while at the same time are more exposed to the negative impacts of climate change, and are subject to exclusion and discrimination in many areas of life (see Legal corner – Equality and non-discrimination in accessing energy services –services – CHEZ Razpredelenie Bulgaria judgment of the Court of Justice of the European Union (C-83/14)). For example, as recent FRA Roma survey data from 10 Member States show, around 10 % of Roma homes do not have access to any kind of heating facility, and 3 % to electricity supply.

> **Perhaps the unfair aspect is that we didn't first address the issue of citizens who have no energy access at all. (…) There are still 15 000 or 17 000 citizens living in unelectrified buildings.**
>
> *Romania, expert.*

3.2.2 Tackling energy poverty among people in vulnerable situations

Effectively protecting the rights of persons in vulnerable situations requires a comprehensive approach to tackling energy poverty and mitigating the potential negative impacts of energy transition measures. Chapter 2 highlights that NECPs insufficiently address vulnerability: the existing categorisations focus primarily on energy poverty and often overlook other, interlinked situations of vulnerability. Similarly, energy transition programmes in 10 Member States tend to target certain groups selectively and frequently lack adequate safeguards to offer meaningful support for all people in vulnerable situations. Addressing the root causes of energy poverty – such as through energy renovations and the adoption of renewable energy in housing – demands clear identification of vulnerable groups and tailored measures that meet their specific needs.

In Czechia, the 'vulnerable customers' definition, introduced via an amendment to the Energy Act No 458/2000 Coll. in 2023, refers to people who use equipment that requires a continuous supply of electricity, the use of which is necessary to maintain basic life functions. For example, bedridden people whose health or life would be at risk if the equipment were to be disconnected from electricity. Non-governmental institutions and the Public Defender of Rights criticised this definition as too narrow, noting that it fails to cover many people who experience energy poverty – for example, tenants who account for two thirds of energy-poor households in the country.

The national CO2 pricing for buildings and transport in Germany affects all end users of heating and transport fuels due to the increased costs of fuel use. A study by the German Environment Agency indicates that the distributional effects depend on factors such as the age, family status and place of residence of the end user, along with whether the property is a rental property, its energy-efficiency levels and the type of heating system in use. Households with below-average income are disproportionately affected, as they spend a higher share of their income on energy than above average-income groups. To mitigate it, several measures were put in place, such as abolishing green electricity levy under the Renewable Energy Sources Act, or the CO2 Cost Sharing Act which determines sharing the CO_2 costs between tenants and landlords depending on the energy efficiency level of the building. Households with no or low income can apply for a minimum income scheme (Bürgergeld), which covers heating costs, including CO_2 costs or housing allowances. At the same time, the rate of energy renovations of buildings in Germany has been below 1 % for years.

> **The most prominent example is somehow an older woman, living alone in the countryside in an old, detached house. She bought it at some point, her husband died, she no longer has a high pension, owns a property but often has a very low income. If the house is in a poor energy condition, one must heat it a lot and then the CO2 price hits harder […].**
>
> *Germany, civil society.*

In Spain energy poverty has been on the rise and the most disadvantaged households or low-income households often live in energy-inefficient houses. Tenants in the private rental market are disproportionately impacted by energy poverty. Research has identified other fundamental-rights-relevant intersections, such as single parents, people with low education levels, woman-led households, older adults and people suffering from health issues, along with the disproportionate impact on the migrant population.

> **The prevalence of energy poverty among the migrant population is higher than among the Spanish population. It's not a very revolutionary discovery, right?**
>
> *Spain, expert.*

Experts noted local administrations' limited awareness of cases of extreme energy poverty among people living in isolated settlements (*infravivienda*) with substandard and overcrowded houses (see also Promising practice – Energy counters (Guichets Énergie) in Belgium). One of the EPAH interventions did include addressing extreme poverty in the historical city centre of Lorca, where around 80 % of the homes visited by staff and social workers do not meet basic standards of habitability, safety or access to water and energy. Targeting intervention to these groups poses significant challenges at every stage of policy-making, however the previous National Strategy against Energy Poverty 2019-2024 mentioned the *infravivienda* only once, and the NECP not at all.

> **And then there are very extreme situations that are invisible. […] In this little bubble, we're in, we imagine that the homes are like our own, where people are just cold.**
>
> *Spain, public authority.*

Interviewees highlighted the value of developing and tailoring interventions to local needs and with the direct involvement of the target populations. The Naturgy Foundation research in Spain

highlights the crucial role of social services departments and third-sector organisations in tackling energy poverty, as they work closely with both vulnerable households and communities and collaborate with energy advice providers. However, in practice social workers face considerable challenges, including insufficient staffing, limited training and expertise, and, particularly in the third sector, precarious working conditions, which limit their capacity to address the populations in need. At the same time, experts highlighted that seeking assistance from social services can be seen as stigmatising, potentially deterring people from accessing available support – especially in the context of exclusion and low trust towards authorities. Experts emphasised that implementing a universal approach (i.e. one-stop shops) and avoiding stigmatising language such as 'poverty' or 'disadvantaged' should be a priority.

> **We prefer to talk [about] the right to energy than energy poverty alleviation.**
>
> *Spain, civil society*

Policy context – the EU Energy Poverty Advisory Hub

The EPAH provides technical assistance to local governments in their efforts to tackle energy poverty and to develop local strategies and policies. Each selected municipality is matched with experts based on their specific needs and geographic areas, who assist in assessing energy poverty circumstances or planning, executing and monitoring energy poverty reduction initiatives.

Renewable energy communities are an important way to support people experiencing energy poverty and in vulnerable situations. Citizens, small businesses and local authorities facing energy poverty can come together to generate, manage and consume their own energy. A recent JRC study identifies providing affordable and sustainable energy services as a means to fight energy poverty.

Promising practice – Energy communities for vulnerable regions in Italy

The regions in southern Italy have the lowest incomes in the country. They are also significantly impacted by the increase of average temperatures and frequency of

heatwaves, which leads to an increased energy demand for cooling buildings. The Energy and Social Communities project (Comunità Energetiche e Sociali) by the Con il Sud foundation is an initiative that specifically targets vulnerable communities in the southern Italian regions (Campania, Sicily, Apulia and Basilicata). The project facilitates the establishment of energy communities which enable citizens to actively participate in the production process and management of energy. As part of the project, citizens, in collaboration with third-sector organisations, install solar panels on community buildings, such as parishes, community centres and community kitchens.

Source: Berti et al., 2023.

3.3 Conclusion

The EU energy renovation programmes are often not available to all on an equal basis, and in practice, they exclude tenants, people on low incomes, older people, people with disabilities or without digital access, and other people in vulnerable situations. Eligibility rules and criteria focused on technical aspects of the building and property ownership, complex digital-only application processes, coupled with financial barriers, restrict access for those most in need. These shortcomings risk deepening existing inequalities and undermining the fair distribution of benefits from the energy transition, with potential negative effects on the enjoyment of the right to housing and the right to non-discrimination. A rights-based approach to energy renovations is essential to ensure that everyone can benefit and that no one is left behind.

4. Participation and stakeholder engagement in the energy transition

Meaningful participation, transparency and accountability are central principles of a HRBA. Their application at all stages of the design and implementation as well as transparent monitoring of measures are fundamental to ensure effectiveness and social acceptance of the transition. This chapter analyses how elements of stakeholder engagement and participation are applied in practice in the context of energy transition and renovation measures at the EU and the national levels and how this may impact on the effectiveness of the policies.

4.1 Ensuring the right to information: transparency and awareness

The Aarhus Convention, to which the EU and all Member States are parties, enshrines the right of access to information in environmental matters (Article 4). The EED in Article 22 requires Member States to ensure that the public is informed in a transparent and accessible way about the available energy efficiency improvement measures. Article 18 EPBD requires Member States to establish one-stop shops to provide information about the energy performance of buildings and offer dedicated services for vulnerable households, people affected by energy poverty or in low-income households.

FRA's fieldwork findings show limited efforts with regards to awareness-raising and information campaigns. All too often available information was online-only, formulated in technical language or did not present the programmes' complexities in a clear manner. Without targeted communication strategies, people belonging to specific groups may not be aware of energy transition programmes, even less so how to benefit from them. At the same time, promising practices were identified, including targeted outreach efforts that take into account the different situations of potential applicants.

Table 6 – Information campaign and channels

Member State	Information campaign dedicated to programme	Information campaign tailored to vulnerable groups	Information channels	Information available in other languages
Belgium	Yes	No information available	Websites, local consultants and local advice centres, public events, radio, television, print	Yes, German
Czechia	Yes, including localised campaigns	No	Website, social media, television, local consultants	No
Estonia	Yes	Yes	Websites, press releases, information days in regional centres, regional consultants	Yes, Russian and English
France	Yes	Yes	Websites, radio, television, newspapers, local advice centres and consultants	No
Germany	No	No	Website	No
Greece	Yes	No	Website, technical consultants, radio, television, print	No
Poland	Yes	No	Website, advertisements in the press	Partially in Ukrainian
Romania	Yes	No	Website, press statements	No
Spain	Yes	Yes	Website, social media, posters, energy one-stop shops, special events, educational and community activities, local media outlets, local organisations	No information available
Sweden	Yes	No	Website, social media, printed leaflets	Partially in several languages

Source: FRA, based on Franet (2024) country reports.

A survey in France showed that the programme MaPrimeRénov' was among the most well-known aid programmes in France. Agence nationale de l'habitat (ANAH), the operator of the programme, raised public awareness of the programme itself but also of the topic of energy efficiency, via local mobile outreach initiatives, local advice centres and regional advisors throughout the country. Targeted communication and guidance for vulnerable groups was mainly provided by associations such as Solidaires pour l'Habitat.

> **ANAH is carrying out a 'tour de France' to reach out to users. In fact, I think there is a dual interest: first, to go and educate, to explain, to present the systems, so it is also an approach to 'reach out' or to inform. But these are also approaches that allow [them] to recover information and elements of satisfaction in all ways.**
>
> *France, public authority.*

In Czechia, interviewees pointed to the 2024 educational television series broadcast on Czech television as a successful dissemination tool and a driver for increasing public awareness on energy efficiency topics (see Promising practice – Educational TV series in Czechia).

Promising practice – Educational TV series in Czechia

The six-episode educational television series 'Šetrný a Platil' (Mr Saver and Mr Payer) was organised in collaboration with the Czech State Environmental Fund and the New Green for Savings programme. In six short episodes the series explains in an engaging and accessible way the cost and environmental benefits of energy-saving renovations for homes such as insulation, heat pumps and solar panels.

Source: Šetrný a Platil; based on Franet Czechia country report (2024).

The research also points to the importance of targeted efforts at the local level. In some programmes, while targeted and accessible information campaigns to reach marginalised communities are largely missing, local stakeholders contribute to outreach. For example, in Poland, collaboration with parish priests helped to promote the programme in smaller communities. In Romania, a civil society organisation (Greenpeace Romania) has, on its own initiative, developed a website about the programme informing potential applicants about the benefits of producing their own energy and how to handle the administrative requirements of the programme.

Promising practice – Engaging consultation on the local level in Romania

In the municipality of Arad, local authorities implemented targeted awareness-raising activities to help residents understand the programme and apply successfully. This included organising meetings, explaining the benefits of photovoltaic systems, providing personalised consultancy, and simplifying the process by offering assistance with collecting documents and completing applications. These actions helped to reach groups who might otherwise have been unaware of the programme (including, but not only, older people). The municipal team helped 119 households to apply to the programme – with 107 successful applications.

Source: Greenpeace Romania; based on Franet Romania country report (2024).

Interviews highlighted that in many cases, the programmes are broadly accepted in society. Related major challenges are often linked to problems with their implementation. For example, insufficient technical advice (e.g. on the most suitable heating technology), concerns about fairness and equal access to the programmes, instances of fraud and lack of related safeguards, along with unpredictability related to funding.

4.2 Participation and stakeholder engagement

Participation is a key element of a human-rights-based approach, and is an international obligation under the Aarhus Convention (Articles 6 to 8). The European Green Deal recognises that active public participation, involvement and commitment of the public and of all stakeholders is crucial to the success of the transition, with EU citizens as its driving force. Public consultation is one mechanism to enable participation. The Governance Regulation requires Member States to ensure that the public is given early and effective opportunities to participate in the preparation of the integrated national energy and climate plans and long-term strategies (Article 10) and to establish multilevel climate and energy dialogue bringing together different stakeholders from all levels of governance (Article 11). The EPBD obliges Member States to carry out public consultations in preparation of NBRPs, involving in particular local and regional authorities and other socioeconomic partners, including civil society and bodies working with vulnerable households to facilitate the effective implementation of the directive (Articles 3(4), 29–30).

The EEA briefing on public participation in sustainability transitions stresses that involving the public is essential in designing and implementing these transitions. The Eurofound brief emphasises that multistakeholder partnerships are essential for a socially just transition and identifies enablers and barriers to strengthen such partnerships.

FRA's research has identified that stakeholder consultations were in place in preparation for some of the programmes, for example in Czechia through the State Environmental Fund and by consulting key stakeholders of the programme in Estonia.

In Belgium, various stakeholders were consulted during the design and implementation phases of Rénopack. Measures were taken to ensure accessibility for people with disabilities, and people with lower digital skills, through phone assistance and face-to-face support.

> **[These] consultations […] had the merit of being truly open, of bringing together a huge number of stakeholders and of having a dialogue between consumer associations, anti-poverty associations, real estate agencies, social agencies, the entire social housing sector too [… as] it is also a big issue in renovation for disadvantaged groups.**
>
> *Belgium, expert.*

Participation **during the implementation**, **monitoring and evaluation of programmes**, or regular consultations with the Member State's authorities, are not foreseen in the majority of the programmes, with the exception of the French programme MaPrimeRénov', which is subject to review by the National Housing Council (Conseil national de l'habitat), a multi-stakeholder consultative body of the Ministry of Housing.

The findings in Spain point to the importance of continuous engagement activities to build and maintain trust (Parreño-Rodriguez et al., 2023). Interviews confirmed the importance of local political commitment in fostering stakeholder engagement and the need for more personnel to effectively and sustainably engage with the affected communities.

In countries where consultations were organised, interviewees often pointed to the lack of transparency in the processes and clarity about why certain inputs are reflected and others are not. In Romania, the programme draft was open to public consultation as required by national law and published on the website of the Ministry of Environment, Water and Forests. However, it was seen as a 'tick-box' exercise, with 10 days to submit feedback via email and lacking genuine effort to engage with stakeholders. Programmes in Greece and Poland lacked structured public consultations – experts highlighted that only ad hoc consultations were conducted with stakeholders, often selected in a discretionary way and without sufficient public information about the processes and decisions.

4.3 Conclusion

The right to participation and access to information is key to ensuring a just climate and energy

transition. However, programmes assessed across the EU often fall short of ensuring meaningful and inclusive engagement. Information about programmes is frequently inaccessible or overly technical, and targeted outreach to vulnerable groups is rare, diminishing the ability of those most affected to access the programmes. Strengthening rights-based, inclusive participation and transparent communication is essential to ensuring that all rights holders can contribute to and benefit from the energy transition in the EU.

5. Accountability: effective structures for fundamental-rights-compliant energy policy implementation

When implementing EU law, Member States have legal obligations to ensure access to services of general interest (Article 36 of the Charter) and to guarantee a high level of environmental protection (Article 191 TFEU) to everyone on their territory and may be held accountable if they fail to meet these obligations.

Article 41 of the Charter enshrines the right to good administration by EU institutions. The CJEU has recognised it as a general principle of EU law that is also applicable to Member States when implementing EU law, as regards the obligation for administrations to provide reasons for their decisions [6]. The Charter also guarantees the right to an effective remedy (Article 47). The availability of complaint mechanisms – administrative decision review and other non-judicial forms – are important for the realisation of the right to access remedy and complement available judicial review avenues. At the same time, it is important that the complaint mechanisms and the judicial procedures are accessible in practice: supporting measures and the access to information play a particularly important role to ensure effective access to justice.

This chapter outlines governance and accountability structures and elements that contribute to the effective and fundamental-rights-compliant implementation of energy renovation programmes.

5.1 Fundamental-rights-compliant funding and finances

Energy transition programmes require financial investments, which are supported by EU funds. The availability of sufficient financial resources plays a crucial role in the energy transition and establishing climate efficient housing. As highlighted in FRA's report EU funds –Ensuring compliance with fundamental rights, all EU funds must be spent in a way that respects fundamental rights. Eight funds governed by the Common Provisions Regulation must comply with explicitly defined fundamental rights standards. FRA indicated that fundamental-rights-enabling conditions should be applicable to all EU funds, including the Social Climate Fund and NextGenerationEU Fund, as one of the ways forward to strengthen the fundamental-rights-compliant EU green transition.

Of the 10 programmes analysed, 5 were fully or partially financed from EU funds – including in Czechia (RRF and Modernisation Fund), Estonia (Cohesion Fund and the Just Transition Fund), Greece (RRF), Poland (RRF and the European Funds for Infrastructure, Climate, Environment 2021–2027), and Spain (technical assistance provided within the EPAH initiative of the European Commission). Almost all of them lack explicit fundamental rights conditionalities or specific objectives or targets related to a socially just transition, with the exception of the Estonian

programme which explicitly incorporates accessibility-related objectives (albeit limited, see Chapter 3). Notably, this is also the only programme in the sample financed from the EU funds governed by the Common Provisions Regulation.

Promising practice – Accessibility improvements within energy renovations in Estonia

The Renovation Grants 2022–2027 programme in Estonia includes among its objectives 'a safe and high-quality living environment that takes into account everyone's needs', assessed through three main indicators: satisfaction with the living environment, accessibility and net greenhouse gas emissions in tonnes of CO_2 equivalent. Accessibility adaptations – such as the installation of ramps, handrails and elevators – are among the eligible expenses.

Source: Regulation on the Conditions for the energy efficiency grants for apartment buildings (*Korterelamute energiatõhususe toetuse tingimused*, 3 March 2023 No 13), Articles 1 and 6.

Other programmes are funded from Member States' own national and regional budgets, and subject to different funding rules and formats. Some of the 10 programmes target specific groups in vulnerable situations (as described in Chapter 3 above). However, none of the programmes include explicit fundamental rights conditionalities. They also do not define specific social indicators (see also Chapter 5.2).

Research also revealed negative and inadvertent side effects of some of the energy renovation programmes, for example, inflated market prices for construction materials and services, or unfair practices by private enterprises participating in the programmes. Interviewees further pointed to controversies in programmes, fraud attempts and misconduct in several countries, potentially impacting on the right to housing and accessing affordable and sustainable energy.

5.2 Monitoring and data collection

Timely and comprehensive monitoring is a key element to take account of the progress towards achieving the climate targets of Member States and to tailor measures to specific needs for different groups and regions in a fundamental-rights-compliant manner. Monitoring progress and compliance with fundamental rights and gathering respective data is one of the principles of a HRBA. It is also in line with the better regulation guidelines (2023) that call for evidence-based lawmaking and monitoring implementation of EU legislation. The FRA report Towards a fundamental-rights-compliant European Green Deal stresses that there is currently 'no comprehensive monitoring framework to evaluate the impact of environmental factors or policies on fundamental rights, which could be applied to assess the just transition.' This is still the case.

Human rights indicators are essential in the implementation of human rights standards and commitments, to support policy formulation, impact assessment and transparency.

FRA activity – Human rights indicators frameworks

FRA employs a human rights indicator framework to assess compliance with human rights standards. It covers: (1) the legal and policy frameworks in place (structural indicators), (2) the concrete interventions to implement them (process indicators) and (3) the achievements, as experienced by the rights holders (outcome indicators). The FRA report Getting legislation right – the role of human rights impact assessments in lawmakingfinds that there is limited use of human rights indicators to evaluate the impact of adopted legislation on fundamental rights.

At the EU level, there are a number of monitoring mechanisms and indicators to track the progress on the implementation of the European Green Deal and related policies (Table 7).

Table 7 – EU monitoring mechanisms and indicators related to the Green Deal and its social impact

Policy/legislative file	Monitoring framework / indicators
Governance Regulation	NECP progress reports
European Climate Law and European Green Deal	8th Environment Action Programme indicators
	Green Deal dashboard
European semester	Scoreboard (macroeconomic imbalance)
European Pillar of Social Rights	Social scoreboard
Recovery and Resilience Facility	Recovery and Resilience scoreboard
UN SDGs	SDG indicators EU database
	EU and national voluntary reviews
EPAH	National indicators dashboard

Source: FRA.

However, the analysis shows that the different databases are often not interlinked, making it difficult or impossible monitor the impact of climate change mitigation on fundamental rights and

socioeconomic living conditions.

For example, the Green Deal dashboard includes only one indicator related to energy poverty – the population unable to keep their homes adequately warm – disaggregated for country and low-income groups. While data for age, gender and disability are available for all EU-27 countries, these are not integrated or displayed in the dashboard. FRA data on Roma, Travellers, immigrants and descendants of immigrants show significantly higher rates of energy poverty among these groups than in the general population (see also Chapter 3). Few other indicators within the 8th Environment Action Programme dashboard provide insights on the environmental risks and impacts on individuals, such as the EEA indicator on environmental inequality which monitors the $PM_{2.5}$ levels (concentration of fine particulate matter in the air, WHO air quality guidelines) in relation to income and regions. The data show a 30 % higher exposure for the lowest income quintile in comparison with the highest income quintile, highlighting the persisting environmental inequalities and exposures – as air pollution is linked to significant environmental health risks and associated with an increased number of premature deaths. While the Recovery and Resilience Facility includes both green transition and social and territorial cohesion among its six pillars, the related targets and indicators are reported on separately.

Although there is clear evidence of the unequal impact of environmental, climate change mitigation and adaptation measures, there is also a persistent lack of data disaggregation to capture the impact on those in vulnerable situations. The absence of integrated and systematic monitoring of a just transition, including the impact on socioeconomic conditions and fundamental rights is observed at all stages, at the EU, national and local levels, in programmes and projects. A Belgian policy paper on a just transition towards climate neutrality recognises that the monitoring of the implementation of the European Pillar of Social Rights uses a robust set of social indicators, while operating independently from the monitoring of climate policy, and recommends the creation of an EU Just Transition Scoreboard.

A 2024 JRC report, based on an analysis of household surveys, suggests an analytical framework to monitor energy justice, focusing on wellbeing impacts rather than only on energy poverty. It calls for broader socio-technical factors and context to be taken into account when designing projects and funds.

Promising practice – Mandatory energy poverty monitoring framework of the Covenant of Mayors

Starting from 2025, the signatories of the Covenant of Mayors – an EU initiative bringing together local governments committed to local energy and climate action – must report on energy poverty as part of their Sustainable Energy and Climate Action Plan or monitoring reports within the initiative. They need to define a clear energy poverty objective tailored to their local context, provide a comprehensive energy poverty monitoring framework, at least one standardised metric to track and report energy poverty, and a detailed key action to address

energy poverty in-depth following the reporting guidelines.

Source: Covenant of Mayors, Reporting on energy poverty.

The Governance Regulation requires Member States to regularly report on their progress in biannual NECPRs (see Chapter 2). The 2023 Commission assessment shows that monitoring the impact of policies and measures in regard to reaching the climate targets is limited: while all Member States reported on progress, the information provided was often insufficient to provide a collective EU assessment. The topics and indicators cover primarily technical targets on greenhouse gas emissions reduction, energy efficiency and security, achieving an interconnected internal energy market, along with research and innovation.

The fieldwork research in 10 selected Member States shows that in all countries, except for France, the projects and programmes lack a systematic approach to including a combined assessment of the ecological and social impacts. In some countries, for example Czechia and Poland, limited data collection is required but challenges with accountability and data transparency and sharing have been identified.

> **The fact that the programme does not have a central database of all applications, which should serve as the core for monitoring and reporting, is a significant flaw.**
>
> *Poland, civil society.*

In Germany, the social monitoring system for climate protection (Sozialmonitoring Klimaschutz), have been proposed but not yet implemented.

Promising practice– Regular quantitative and qualitative data collection on the outcome of renovations in France

The French National Observatory for Energy Renovation conducts a survey every three years on energy renovations, gathering input from households, property managers, condominium associations in the private sector and social housing providers. The monitoring covers not only the renovations supported within the programmes, but also those implemented independently. It collects household data on the perceived progress after renovations and their impact on quality of life.

Source: French National Observatory for Energy Renovation, based on Franet France country report (2024).

5.3 Access to justice and complaints mechanisms

Access to justice refers to the right of individuals to protect themselves from infringement of their rights, to defend themselves and to hold governments and administrations accountable. Article 47 of the Charter enshrines the right to an effective remedy and a fair trial. Article 19(1) of the TEU (paragraph 2) indicates that Member States shall provide remedies sufficient to ensure effective legal protection in the fields covered by EU law, including energy.

The Aarhus Convention enshrines three key rights on environmental issues: the right to access to justice, which includes the right to review administrative decisions by a court or another independent body, to ensure that public authorities respect the rights of access to information and the right of public participation, and general environmental law. Access to justice is fundamental to holding public administration authorities accountable for their decisions and actions that do not comply with environmental law.

The EU is a party to the Aarhus Convention. EU laws implementing the Aarhus Convention include Directive 2003/4/EC on public access to environmental information, Directive 2003/35/EC on public participation and Regulation 1367/2006 on the application of the provisions of the Aarhus Convention to EU institutions and bodies. Each includes provisions on access to justice.

While the Governance Regulation in its preamble refers to the Aarhus Convention, it does not do so in relation to access to justice. The resulting lack of 'clear, harmonised, and effective access to justice rights to challenge NECPs and strategies in front of national courts if they fail to meet participatory requirements or contravene environmental legislation' was criticised by some stakeholders, as outlined in the Commission's Report to the Parliament and Council on the review of the Regulation (p. 12) and its accompanying document. Gaps in effective access to justice across the EU were identified – due to differences in national legal systems regarding standing or justiciability, the ambiguity of applicable provisions, along with different interpretations of applicable EU law at the national level, among other things (Mähönen, 2024, p. 15).

The Social Climate Fund Regulation similarly does not explicitly include access to justice provisions in the context of SCPs.

However, some of the EU climate and energy laws include provisions related to access to justice and complaint mechanisms, in particular for energy consumers.

Legal corner – Out-of-court dispute resolution mechanism requirement

> ‘Member States shall ensure that final customers, final users, people affected by energy poverty, vulnerable customers and, where applicable, people living in social housing have access to simple, fair, transparent, independent, effective and efficient out-of-court mechanisms for the settlement of disputes concerning rights and obligations provided for in this Directive, through an independent mechanism such as an energy ombudsperson or a consumer body, or through a regulatory authority.’
>
> *Source*: Article 22(8) EED.

The Commission Recommendation 2024/2481 on consumer related provisions of the EED provides further guidance. A similar provision is included in Article 26 of the recast Electricity Market Directive, for example. The EPBD, however, does not include any requirements related to access to justice.

5.3.1 Complaint and review mechanisms in energy renovation programmes lack consistency and transparency

Complaint or review mechanisms exist in all 10 Member States in which FRA conducted fieldwork. However, there were significant variations in terms of the institutions authorised to deal with complaints, the scope of review and the monitoring and decision-making competence of those authorities. Moreover, the formal availability of complaint and review mechanisms does not always translate into accessibility, as practical barriers exist. Additionally, stakeholders highlighted the absence of a systematic approach to the implementation of complaint mechanisms – the perception being that complaints were handled on an ad hoc basis, required legal advice or were subject to complicated and opaque processes.

The most common mechanism is an **administrative review of decisions** under the competence of the authority managing the implementation of the programmes. In Czechia complaints are managed through the State Environmental Fund offices, while in France an appeal against the ANAH decision or reporting cases of fraud is done through an online form. Information on the complaint mechanism in the Belgium Walloon Region also can be found on the Fonds du Logement Wallon website and the dedicated complaint page. Romania issued project guidelines to complaint procedures, as did Poland.

No programme-specific mechanisms exist in Estonia, Spain or Sweden. In Estonia the review of the programme’s authority decision may be submitted according to the general administrative procedural norms. In Spain, individuals can submit complaints on broader matters of energy and social interventions via different complaint mechanisms and relevant authorities, which vary across autonomous communities (see also Chapter 5.3.1). In Sweden, complaints may be referred by tenants to the Swedish Union of Tenants and regional rent tribunals – administrative bodies competent to try tenancy disputes in their respective regions.

Administrative decisions usually can be further challenged before courts. Such action is usually challenging for individuals, as litigation involves costs such as a filing fee (e.g. 5 % of the claim value in Poland) and legal representation costs. Support during the complaint proceeding can be provided by Ombudsfin (Financial Disputes Ombudsman) or the Insurance Ombudsman in Belgium. The Swedish Union of Tenants offers an advisory service which provides legal advice and may also pursue litigation on behalf of tenants.

5.3.2 The role of ombudsperson institutions, equality bodies, national human rights institutions and other stakeholders

Relevant institutions such as ombudsperson offices, equality bodies, national human rights institutions, consumer rights institutions and advocacy organisations can further support the realisation of the right to access to justice including in the context of services. These institutions ensure the implementation of the principle of non-discrimination and support the enforcement of human rights – for example by providing additional complaints mechanisms or counselling, legal representation or information. The Directive on Standards for Equality Bodies in matters of social security and access to goods and services sets out the minimum requirements for these bodies to strengthen the application of the principle of equal treatment in this context (see also Chapter 1).

Some complaints alleging discrimination in access to the programme were brought to the ombudsperson in Czechia and the equality body in Romania. Since 2022, the ombudsperson in Czechia has received a total of 23 complaints related to these programmes, two of which specifically addressed the full digitalisation of the application process – though according to the interviewees, in both cases discrimination claims were found to be unsubstantiated. Nevertheless, the ombudsperson has initiated an own-initiative investigation on the topic of digitalisation and access to the programme: the Czech Administrative Code allows both paper and electronic applications, while the Ministry of the Environment's allowed only electronic submissions to programmes. The National Council for Combating Discrimination in **Romania** received and reviewed complaints regarding the application of selection criteria and non-discrimination.

In France, the Defender of Rights may be contacted in case of problems with accessing support through the MaPrimeRénov' programme. The issue of time for processing the application remains a persistent source of dissatisfaction among the public. Between 2020 and 2022, the Defender of Rights received nearly 500 complaints regarding the difficulties faced by applicants in asserting their rights to the aid. The authority identified numerous shortcomings in the processing of these applications.

In Spain, the national ombudsperson (Defensor del Pueblo) has primarily an advisory and oversight role, protecting citizens' rights by issuing reports to the Cortes Generales (Spanish Parliament), but also may also act *ex officio*, such as when they expressed interest in working for the improvement of the conditions in the informal settlements, particularly of Cañada Real near

Madrid, or supported the action of the regional ombudsperson of Andalusia.

Promising practice – Ombuds office interventions to address energy poverty in Catalonia

Current legislation grants the Catalan ombudsperson the authority to defend residents' rights in their interactions with private companies providing public services, such as energy companies. Residents can submit a complaint against energy companies in Catalonia directly to the ombudsperson.

Source: Spain, Catalan Autonomous Community, Law 5/2002 of 27 March on the Ombudsperson; based on Franet Spain country report (2024).

5.4 Conclusion

The right to an effective remedy, including access to justice, is a fundamental right, which should also be guaranteed in the context of the energy transition. However, current governance structures and complaint mechanisms for energy renovation programmes are often fragmented, lack transparency and are difficult to access in practice, especially for vulnerable groups. The absence of systematic monitoring and disaggregated data further undermines the ability to assess and address the fundamental rights impacts of climate and energy policies. Strengthening rights-based accountability, transparent complaint mechanisms and robust monitoring are essential to ensure that everyone's rights are protected throughout the climate and energy transition.

Conclusions

Energy renovations are an important mitigation measure to achieve the objectives of the EU's climate and energy transition. They also impact fundamental rights: by improving energy efficiency and incorporating clean energy technologies, these renovations make affordable and clean energy more accessible, which is crucial for people experiencing energy poverty who struggle to meet basic energy needs or face disconnections. By contributing to climate mitigation and enhancing climate resilience, such as through measures for better insulation against extreme temperatures, they also help to safeguard health and environmental rights. Energy renovations further impact the right to housing. While energy renovations can improve housing standards and contribute to adequate living conditions, they can also compromise housing affordability and drive displacement, especially for low-income individuals, tenants and vulnerable groups. The right to housing and access to clean and affordable energy are key for the effective enjoyment of many other fundamental rights, including the right to health.

Energy renovations and related measures addressing energy transition and energy poverty should be implemented in a fundamental-rights-compliant way: ensuring equal access and effective targeting of people in situations of vulnerability are key. FRA's research shows that both the relevant EU policy framework and Member States' efforts and investments to enhance energy efficiency in housing to reach climate targets do not integrate fundamental rights systematically. Energy renovations often inadvertently exclude people in vulnerable situations and risk exacerbating existing inequalities, including in the context of the right to adequate housing. The complexities of the programmes and the online application process were identified as a major obstacle for people in situations of vulnerability, such as older people, people with disabilities, people with a migrant background or people with lower levels of education or digital skills. Governance structures that fail to take due consideration of fundamental rights result in unfair and unintended unequal access to energy renovation measures. The report argues that the EU Charter of Fundamental Rights obliges Member States to protect all people in the EU from any form of discrimination and to ensure access to and the supply of goods and services, including energy services in the context of the climate and energy transition required by EU law.

The report proposes a human-rights-based approach to the climate and energy transition that explicitly integrates fundamental rights into EU climate and energy transition policies, including those governing energy renovations. In 2026, the European Commission will revise the EPSR action plan, develop for the first time an EU Anti-Poverty Strategy and begin implementing the European Affordable Housing Plan. These actions provide unique opportunities to integrate EU funds with social and climate change policies in a fundamental-rights-compliant manner.

Annex 1 – Methodology

In 2024, FRA collected data with a focus on the priority strand of the EU Green Deal of clean, affordable and secure energy, and specifically on measures addressing energy renovations in residential buildings and/or energy poverty, to explore fundamental rights implications, challenges, gaps and promising practices. The research was conducted by the FRA research network (Franet) and covered desk research in the EU-27 and three FRA observer countries (Albania, North Macedonia and Serbia), followed by in-depth fieldwork case studies in 10 selected EU Member States (Belgium, Czechia, Estonia, France, Germany, Greece, Poland, Romania, Spain, Sweden). These countries were selected because they had at the time draft National Climate and Energy Plans and Just Transition Plans and based on information they provided on green transition projects and its social impact. Additional selection criteria considered were geographical coverage and variation in exposure to the impacts of climate change.

The fieldwork case studies included initial desk research to identify major programmes and projects suitable for in-depth research according to their relevance, validity and feasibility to be researched (see Table 3).

Relevance:

- A major action within a region or country to contribute to the EU and national climate targets or climate resilience.
- An action with clear impact on citizens with known or expected risks of unequal enjoyment of fundamental rights, access to services and distribution of means.
- Groups can be identified which are disproportionally affected by the action or by consequences of climate change, including characteristics protected under anti-discrimination law.
- The action could potentially deepen existing inequalities and structural discrimination.
- A region or group which is particularly vulnerable to climate risks.

Validity:

- The action is exemplary for implementing climate action.
- The action has not yet been assessed along similar research questions.
- The action should contain several elements of the research dimensions:
  - monitoring,
  - decision-making and participation,
  - safeguards,
  - specific projects for vulnerable groups,
  - social acceptability.

Feasibility:

- Action has started and is sufficiently developed to be further explored.
- Stakeholders can be identified, documentation is available.
- Research is possible and interviewees can be identified.
- Data can be obtained.
- Research is possible within the timeline and available resources.

Meeting all these criteria proved difficult, as many projects have not fully started or only little information was available. Furthermore, the research faced practical difficulties such as the non-availability of experts or information. For example, in Sweden the project initially selected focusing on the Northvolt battery factory had to be replaced after police investigations were initiated due to alleged irregularities.

The projects identified in all countries at the desk research stage showed significant differences, in type, scale and stage of implementation. Therefore, the analysis in this report combines comparative research and a case study approach to identify how fundamental rights are taken into consideration in the climate and energy transition. The projects were not evaluated in depth, but contextual information was collected to understand the logic of processes and interventions.

Each country conducted 10 semi-structured interviews with experts coordinating and implementing programmes, representatives of public authorities, civil society organisations and other policy and academic experts between June and November 2024.

Some of the projects and programmes have undergone changes since fieldwork was implemented, for example, in France, Poland and Belgium the programmes were put on hold, either due to investigations on irregularities and fraudulent practices or because of shifting political priorities, and the programme criteria have been amended. As data collection was finalised in late 2024, the report does not account for these developments.

Acronyms and abbreviations

- CJEU– Court of Justice of the European Union
- CRPD– Convention on the Rights of Persons with Disabilities
- EEA– European Environment Agency
- EED– Energy Efficiency Directive
- EPAH– Energy Poverty Advisory Hub
- EPBD– Energy Performance of Buildings Directive
- EPSR– European Pillar of Social Rights
- ESC– European Social Charter
- EU– European Union
- FRA– European Union Agency for Fundamental Rights
- GHG– Greenhouse gas
- HRBA– Human-rights-based approach
- ICESCR– International Covenant on Economic, Social and Cultural Rights
- JRC– Joint Research Centre
- NECP– National Energy and Climate Plan
- NECPR– National Energy and Climate Progress Report
- RRF– Recovery and Resilience Facility
- SCP– Social Climate Plan
- SCFR– Social Climate Fund Regulation
- SDGs– Sustainable Development Goals
- TEU – Treaty on European Union
- TFEU– Treaty on the Functioning of the European Union
- UN– United Nations

Country codes

- **AT**– Austria
- **BE**– Belgium
- BG– Bulgaria
- CY– Cyprus
- CZ– Czechia
- DE– Germany

- DK– Denmark
- EE– Estonia
- EL– Greece
- ES– Spain
- FI– Finland
- FR– France
- HR– Croatia
- HU– Hungary
- IE– Ireland
- IT– Italy
- LT– Lithuania
- LU– Luxembourg
- LV– Latvia
- MT– Malta
- NL– Netherlands
- PL– Poland
- PT– Portugal
- RO– Romania
- SE– Sweden
- SI– Slovenia

Endnotes

[1] European Union Agency for Fundamental Rights, Applying the Charter of Fundamental Rights of the European Union in law and policymaking at national level – Guidance,Publications Office of the European Union, 2018. This reportis based on the CJEU case-law and is available in all EU languages, except Irish and Maltese.

[2] Based on Franet information request submissions. Albania, North Macedonia and Serbia are observers to FRA and were included in the sample for the first stage of the research – see Annex I. Their NECPs are available at the webpage of the Energy Community Secretariat.

[3] The Third Strategic Plan for the Effective Equality of Women and Men 2022–2025.

[4] See also One-Stop Shops for Energy Communities – Mapping service design attributes, synergies, and challenges.

[5] See, for example, Eisfeld and Seebauer, 2022, and Meyer et al., 2018.

[6] See Joined Cases C-225/19 and C-226/19, Minister van Buitenlandse Zaken, paragraph 34 and C-230/18 PI, paragraph 57.