Opinion of the European Economic and Social Committee on A strategic vision on energy transition to enable the EU's strategic autonomy

(own-initiative opinion)

(2023/C 75/15)

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1. **Conclusions and recommendations**

1.1. At the end of 2021, the EESC decided to develop a comprehensive vision for the energy transition. On 18 January 2022, the EESC decided that all sections and the CCMI should include own-initiative opinions on various aspects of the energy transition in an overarching opinion on *A strategic vision for the energy transition to enable sustainable development*.

However, the current situation in Ukraine after the military invasion by the Russian Federation moved the energy transition to the top of the priority list, as the consequences for the EU's energy supply and energy prices are unprecedented.

In light of the current crisis and taking into account the objective of ending the EU's dependence on Russian gas by 2030, this EESC opinion presents a comprehensive vision for the energy transition in order to build and promote the EU's strategic autonomy in the field of energy.

In order to develop a long-term strategic vision, this framework opinion summarises:

— conclusions and recommendations from the sectoral own-initiative opinions ([1]);

— conclusions from the opinions on REPowerEU and the REPowerEU plan and the forthcoming legislative proposals; and

— conclusions and recommendations from previous EESC opinions.

1.2. The EESC draws attention to the risk of the combined economic and social effects of the current energy crisis putting the democratic system under strain unless adequate solutions are found. Therefore, the EESC supports the implementation of immediate measures to address the most pressing issues, in particular to ensure security of supply at a cost that is 'as affordable as possible' for both consumers and industry, which are affected by the current dramatic price increases.

([1]) OJ C 486, 21.12.2022, p. 67; OJ C 486, 21.12.2022, p. 88; OJ C 486, 21.12.2022, p. 53; OJ C 486, 21.12. 2022, p. 1; OJ C 486, 21.12.2022, p. 59; OJ C 486, 21.12.2022, p. 23; OJ C 486, 21.12.2022, p. 198

1.3. Climate change is increasingly becoming a bitter reality in Europe. Moreover, the current energy crisis, aggravated by Russia's aggressive invasion of Ukraine, clearly shows that both the goals and measures proposed under the 'European Energy Union' and the Green Deal are correct in essence, but are not ambitious enough. They are not yet sufficient to lead Europe to a secure, sustainable and competitive 'strategic energy autonomy'. Above all, they are still being tackled far too timidly. A paradigm shift is needed in this respect.

1.4. The potential that Europe has in the field of renewable energies must be identified as accurately as possible and communicated widely in order to promote a common understanding of the extent to which independence from energy imports can be achieved. In particular, the electrification of the heat and transport sectors and the need for domestically produced green hydrogen must be taken into account.

1.5. In addition to exploiting this potential as quickly as possible, energy-saving potential must be exploited even more vigorously. In the current situation, saving energy is the best way to produce immediate effects.

1.6. At the same time, short- and possibly also medium-term measures will be necessary to compensate for lost energy supplies from Russia. LNG imports are one such measure. The EESC thinks it important, however, that this does not create new long-term dependencies on fossil fuels. This must be taken into account in advance in the investment cycle. Overall, the aim is not to diversify dependencies, but to achieve the highest possible level of 'strategic autonomy'.

1.7. This transformation is not just a major technical challenge; it also involves structural issues. In the future, energy production will be much more decentralised than in the past. This also opens up opportunities for cities and regions and other new stakeholders, e.g. MSMEs, and individual and community prosumers. The EESC believes that political decision-makers have still not provided clear indications or measures regarding how hitherto pure energy consumers in particular can become new players. It has pointed out in many of its opinions that acceptance is a crucial prerequisite for ensuring rapid transformation. Participation rights and opportunities are the best ways of gaining this acceptance. It is therefore not only a question of where energy is produced and from which source, but also of who is allowed to earn money from it. The EESC reiterates its call for wide-ranging and targeted information and awareness-raising measures, delivered in a coordinated and complementary manner by the European Commission and the Member States, together with business organisations, chambers, social partners and other relevant stakeholders ([2]).

1.8. The EESC reiterates the conviction it has expressed in previous opinions: not only must social and regional cohesion funds and reconstruction aid be used in a way that supports climate action and the energy transition, but climate and energy policy must also be designed to promote social and regional cohesion.

2. **General comments**

2.1. The EESC draws attention to the risk of the combined economic and social effects of the current energy crisis putting the democratic system under strain unless adequate solutions are found. Therefore, the EESC supports the implementation of immediate measures to address the most pressing issues, in particular to ensure security of supply at a cost that is 'as affordable as possible' for both consumers and industry, which are affected by the current dramatic price increases.

2.2. The consequences of the climate crisis are having a major impact on Europe and the world. The EESC reiterates its strong support for the objectives set out in the Green Deal, for reinforcing strategic autonomy in energy provision and for the transition to a sustainable, climate-neutral economy. The 'energy war' initiated by Russia makes the need to massively accelerate the transformation initiated by the Green Deal even clearer. REPowerEU and other initiatives proposed by the Commission serve to adapt the Green Deal accordingly, but they are not yet sufficiently ambitious.

([2]) OJ C 486, 21.12. 2022, p. 1.

2.3. The social dimension must be taken into account in any measures planned as part of the energy transition. On the one hand, this is needed so as not to jeopardise public approval for the necessary changes and to ensure a just transition. On the other hand, this transformation will also enable positive developments in the regional economy, including new jobs ([3]), which will promote acceptance. As a representative of civil society, the EESC has often provided guidance on how members of the public should be involved so that they can benefit from the 'just transformation'. Unfortunately, these have mostly been ignored, which could lead to greater difficulties in gaining acceptance.

2.4. The EESC believes that the competitiveness of the European economy, particularly the industrial sector and MSMEs as drivers of sustainable innovation, must and can be safeguarded. Intelligent concepts for energy usage — for example, virtual power plants — offer considerable growth opportunities for smaller companies. As MSMEs are an essential part of the solution for a competitive, climate-neutral, circular and inclusive economy in the EU, the right conditions must be created and maintained with targeted forms of support and framework conditions. This is necessary to secure and create economic growth and high-quality jobs.

2.5. While the EU is a frontrunner in cutting CO_2 emissions, other actors need to be involved in climate action. The European Union must step up its diplomatic efforts, enter into new forms of cooperation and use tools such as cooperation and trade agreements to persuade third countries to do more to tackle this crisis. At the same time, the EU needs to have a discourse on whether to shift industrial supply chains back to Europe in order to reduce dependence on Chinese suppliers — for example in the photovoltaic module and battery sector — and at the same time guarantee a fully sustainable supply chain, including in terms of social policy and respect for human rights.

2.6. The current energy (price) crisis and the lack of security, stability and predictability in supply are putting a huge strain on the European Union. The crisis would be less severe if more targeted action had been taken earlier and, for example, if the EU's own objectives (such as those of the European Energy Union) had been taken more seriously. The EESC welcomes the measures proposed in the REPowerEU communication and the REPowerEU plan to ramp up green energy production, diversify supply and reduce demand for Russian gas, as the solutions they put forward are in line with the objectives of the Green Deal and the European Energy Union. In the Committee's view, this should not primarily be a question of diversifying dependencies but rather, as far as possible, of 'strategic energy independence and autonomy'. When it comes to resources to replace Russian gas, the EESC warns that the EU must take particular care with regard to the impact of these resources on the environment, and to new dependencies on third countries which do not share European values.

2.7. The situation on the energy markets in August 2022 has made it clear that no energy source is 100 % reliable at all times. For example, for months, a substantial number of France's nuclear power plants have not been connected to the grid because of maintenance, climate change impact and other issues. Coal-fired power generation has not only had a significant impact on the climate crisis, but is also suffering directly as a result of it: due to low water levels on the Rhine as a result of drought, coal-fired power plants can no longer be supplied. For similar reasons, hydropower has also become less stable, as has been shown in Italy, for example. Moreover, natural gas, whether transported as a gas or in liquid form, is not only harmful to the climate, but also harbours massive geopolitical risks. In other words, in the diversified and secured energy mix that all Member States are currently aiming at, wind and solar energy stand out as strategic, viable sources when looking into the future energy policy of the EU. Compensating for fluctuations in these two energy sources requires, first and foremost, storage facilities and, secondly, green hydrogen, in which wind and solar power can be 'stored' in the long term. The decisive question for Europe's strategic autonomy is how much green hydrogen can be produced in Europe itself and how much must be imported. Also in the time of transformation we shall point to relatively the most reliable and climate efficient source.

2.8. The developments of the last decades and not least the events of the recent past reveal the danger of cyber attacks and acts of sabotage on critical infrastructures such as the energy grid or power plants. Failure or disruption of this infrastructure can cause devastating supply shortages and threaten public security. Critical infrastructure such as gas and

([3]) OJ C 367, 10.10.2018, p. 1.

electricity grids, deep-sea internet cables, offshore installations as well as onshore wind farms and LNG terminals, coal or nuclear power plants, transport and traffic, health services, finance and security could be targets for cyberattacks as well as physical attacks. It is in the interest of everyone in Europe to better protect this critical infrastructure. The EU must be better prepared for potential attacks of this kind. Therefore the EESC calls for an immediate critical evaluation of the measures taken so far and for a comprehensive strategy to protect the EU against threats such as natural disasters, physical attacks and cyber attacks. In this context the EESC recommends that any foreign investment in strategic sectors in the Union conforms with the EU's security policy.

2.9. The EESC welcomes the establishment of a Climate Social Fund ([4]). Nevertheless, the EESC is convinced that the Fund, will not provide sufficient financial support to responsibly face the socioeconomic effects. The enormous challenge of designing an effective and fair compensation mechanism in a heterogeneous economic area comprising 27 Member States requires more far-reaching accompanying measures and resources at EU and national level.

2.10. The massive increase in energy prices has made it clear that today's energy market is only partially sustainable. Commission President Ursula von der Leyen herself, referring to cross-border cost-based pricing on the European electricity exchanges, stated that this system would no longer function if the volume of green electricity continued to rise. Fundamental questions need to be asked about the future of energy in order to ensure a clean, affordable and reliable energy supply and the right to energy. The EESC believes that the way in which the energy market is designed and regulated must be adapted to the new realities of the predominant renewable energies, while creating the necessary conditions for industry, MSMEs and individual actors as well as for the creation of new participation opportunities for prosumers, citizen energy communities, etc. and while strengthening appropriate protection for consumers. When redesigning the market, particular attention must be paid to avoiding existing structural barriers to market access for small market participants. This applies, for example, to access to balancing energy and, if necessary, capacity markets, which may be necessary to ensure security of supply.

2.11. In order to ensure that energy prices are socially acceptable and once again competitive while paving the way for continued EU leadership in the use of renewable energy, the EESC calls for authorisation procedures in the field of renewable energy to be streamlined and sped up, as these procedures are viewed as the main barrier to faster deployment of renewable energy sources. At the same time, the framework conditions for decentralisation measures, energy cooperatives and all forms of prosumption must be significantly improved.

2.12. The EESC strongly supports the Commission's proposal on gas storage and a regulation on coordinated gas demand reduction measures. It calls on the institutions to:

— complement this with an instrument for short-term investment to support the development of hydrogen-enabled infrastructure such as interconnectors and storage facilities;

— consider the use of gas storage facilities in neighbouring third countries;

— establish plans for individual Member States to avoid unbalanced burden-sharing at regional level.

2.13. The EESC points out that the parallel development of centralised and decentralised infrastructure is problematic and that there is a risk of misinvestment. For example, there are competing potential uses for a nationwide hydrogen pipeline network and the expansion of cold district heating networks. The EESC has therefore called for appropriate fundamental decisions to be taken in the interests of investment security ([5]).

([4]) OJ C 152, 6.4.2022, p. 158.
([5]) See OJ C 429, 11.12.2020, p. 85.

3. **Energy transition as an overarching strategy in the EU and international contexts**

3.1. The Russian aggression has caused a global geopolitical crisis, which is having an exponentially growing impact on both the economic balance and global energy security. It has called into question decades of energy, defence and external relation policies, forcing the EU to re-evaluate both its plans and its hitherto far too hesitant actions on green and digital transformation and to consider the ramifications that the Russian invasion and the sanctions imposed will have on the world's continued energy transition.

3.2. The dependence on primary energy imports from third countries has become a direct threat to the security and stability of the EU. That is why the European Commission has swiftly proposed adopting a set of measures adapting European energy policy to the current geopolitical situation under RePowerEU. The proposal for a Regulation on the security of gas supply and conditions for access to natural gas transmission networks reclassifies, for example, gas storage as critical energy infrastructure and imposes both mandatory certification for gas storage facility operators and gas storage filling targets to help the EU take back control of its energy market. All these measures are welcomed by the EESC and should indeed help the EU regain control of its energy market.

3.3. At the same time, given the current political tensions, the EESC considers it necessary to cooperate even more actively with a number of countries that are in a position to supply Europe with energy in the short term until the massive expansion of renewable energy envisaged by the Commission takes effect. These include the United States and, to varying degrees, South American and African countries, whose exports of fossil fuels, which have become necessary in the short term, need to be accompanied by the transfer of knowledge and the development of renewable energy technologies in order to accelerate climate change mitigation there too.

4. **Creating an enabling environment for energy transition**

4.1. *Public investment*

4.1.1. To meet increasing demand for electricity and achieve our climate objectives, we must double investment in the electricity grid to EUR 55 billion per year and increase the budget for building clean generation capacity to EUR 75 billion per year ([6]). In this context, public investment in smart and renewable energy systems as well as storage infrastructure is of great importance when it comes to ensuring security of supply, tackling energy poverty, keeping prices affordable, and creating high-quality jobs.

4.1.2. The EESC once again recommends the 'golden rule' for public investments, as adopted in opinion ECO/569 ([7]), provided that neither the medium-term fiscal stability nor the value of the euro is jeopardised, in order to safeguard productivity and the social and ecological base for the well-being of future generations.

4.1.3. Blended finance involving private investors is only an option if it can be ensured that allocations are transparent, that there are no confidentiality clauses, and that there are no unjustified costs for the public authorities compared to public financing. There must be full transparency regarding justified additional costs. It is therefore all the more important that rights and obligations be clearly defined in such mixed financing models, that liability issues be clarified and that an efficient and rapid system for conflict resolution be provided in order to avoid long-term additional costs and unfavourable liability issues.

4.1.4. With regard to the future organisation of energy systems and energy infrastructure, the EESC has repeatedly stressed the importance of the active participation of all consumers — households, businesses and energy communities — in developing smart energy systems, as well as the need to create incentives to enable civil society to participate in the

([6]) This is the conclusion of the federation for the European electricity industry, Eurelectric.
([7]) OJ C 275, 18.7.2022, p. 50.

energy transition. The role that individuals, farmers, cities, MSMEs and citizen energy communities play in financing measures has clearly been totally underestimated. The EESC points out, for example, that more than 90 % of installed capacity in Germany was not built by major energy suppliers. There is no strategy to exploit this clear potential and readiness.

4.1.5. European energy law does not recognise climate protection as an objective of grid regulation. As a result, national regulators also find it difficult to create incentives for the transformation, expansion and modernisation of electricity distribution grids that meet the requirements of climate neutrality. European energy law should therefore explicitly mention climate neutrality as a goal of grid regulation.

4.1.6. The Commission rightly points out that public investment can and must trigger private investment. However, REPowerEU does not cover the refinancing of the respective public funds. Abolishing subsidies for fossil resources would be one approach for how to organise this; taxing the enormous windfall profits originating from the major oil and gas crisis that big oil companies in particular have benefitted from, would be another. The EESC is concerned that the extremely high profits of energy companies on the one hand and the increased energy poverty caused by energy price surges on the other may have a dangerous destabilising effect on society. The EESC proposes that these profits be skimmed off with the help of taxes and passed on as financial compensation to energy consumers, e.g. financially weaker households or energy-intensive companies, and used to expand renewable energy production and develop the necessary grid infrastructure, especially as this is already being discussed or implemented in some Member States. The EESC takes the view that, to avoid discouraging energy companies from investing in low-carbon solutions, such taxation should be considered very sensitive. The EESC calls on the Commission to propose corresponding measures without any further delay.

4.1.7. Supply policy must go hand-in-hand with infrastructure that enables the appropriate flow of electricity and gas on the European market and ensures grid stability. The EESC is convinced that particular attention should be paid to defining grid development as an overriding public interest, including climate protection as a regulatory objective and, more generally, synchronising the planning of renewable energies and the electricity grid more effectively. There is an urgent need for specific provisions under EU law.

4.2. *Climate Adjustment Fund*

4.2.1. The EU's current mechanism for responding to natural disasters is the European Union Solidarity Fund (EUSF). However, the EUSF's available annual budget is dwarfed by the huge cost of damages ([8]) caused by recent natural disasters and needs to be drastically increased. EU funding for the green energy transition is more substantial, but does not take into account the urgency of the EU's current needs for green energy autonomy.

4.2.2. In the EESC's view, the EU needs a new financing mechanism that can provide immediate and substantial support to Member States in the event of such emergencies. The EESC therefore proposes the creation of a new Climate Adjustment Fund. This funding should be redirected from existing EU funds, notably from the Cohesion Fund and the Recovery and Resilience Facility (RRF), but managed in a streamlined and coherent way through this new Fund.

4.2.3. In modernising the funding environment, the scope of existing programmes could also be broadened, their resources increased and Next Generation EU considered as a model for a new funding instrument. The EESC points out that new resources may need to be created to address the enormous challenges we face. However, any new 'own resources' must be designed fairly to avoid further burdening disadvantaged groups. Moreover, they must not hinder economic development.

4.2.4. It is crucial that the functioning of the Climate Adjustment Fund, more focused on swift and urgent responses, is consistent with the EU's overarching climate, environmental and energy policies, which will in the long run reduce reliance on emergency responses and protect humanity as well as the natural world.

([8]) A staggering EUR 80 billion in Germany in 2021.

4.3. *Promoting technologies*

4.3.1. The green transition in the manufacturing industry needs a basis of a sufficient, stable, proper mix of renewable energy for electrification and for the production of green hydrogen to succeed. Storage technologies are being developed and the opportunities offered by digitalisation are being fully exploited. There is therefore still a considerable need for research and development.

4.3.2. Since the beginning of liberalisation, the investment performance of electricity companies has been declining. The share of public investment in researching and developing decarbonisation technologies is lower in the EU than in all other major economies, jeopardising the EU's competitiveness in key future technologies. The EESC calls on the Commission to draft a strategic plan for investment and encourage the Member States to use the funds optimally and efficiently for clean energy development. The same applies to investment in the electricity grid.

4.3.3. Decarbonisation will require a deep transformation of industrial activities (in the next 30 years). Although many low-carbon technologies already exist, their technology readiness levels (TRLs ([9])) are low. Ambitious technology roadmaps will be needed to upscale and widely deploy these breakthrough technologies, and the EU must promote innovation through the Climate and Innovation Funds.

4.3.4. There is absolutely no doubt that green hydrogen will contribute in the future to a secure European energy system. The EESC refers to its opinions on the hydrogen strategy ([10]) and the strategy for energy system integration ([11]).

4.4. *Supporting MSMEs* ([12])

4.4.1. Micro, small and medium-sized enterprises (MSMEs), be they traditional businesses, family businesses, traders, social economy enterprises, craft enterprises or liberal professions, are an essential part of the solution for a competitive, climate-neutral, circular and inclusive EU economy, provided that the right conditions are created and maintained. MSMEs benefit from improving their own environmental performance and providing expertise and solutions to other businesses, the general public and the public sector. The EESC recognises and highlights the diversity and different needs of MSMEs, but at the same time calls for special attention to be paid to the smallest and most vulnerable of them.

4.4.2. The EESC stresses that there is an urgent need to support MSMEs in understanding and managing the green transition in the best possible way. The EESC calls for wide-ranging and targeted information and awareness-raising measures, delivered in a coordinated and complementary manner by the European Commission and Member States, together with business organisations, chambers, social partners and other relevant stakeholders. Conversely, the important role played by MSMEs in terms of new technologies and innovative solutions for green change in EU industry should also be highlighted and taken into account in funding programme accessibility criteria.

4.4.3. The EESC calls on the EU and the Member States to accelerate green investment in MSMEs by ensuring an enabling, predictable and encouraging regulatory environment, including smooth permission procedures and avoiding burdensome administrative duties, as well as by providing fast, easy, simple and traceable access to finance, tailored to the different needs of all diverse groups of MSMEs.

4.4.4. To improve the resource efficiency of MSMEs, the EESC proposes establishing 'hubs for circularity' (H4C) in various regions. This should enhance cooperation between companies across sectors and facilitate the development of new practices and processes, including demonstrating new technologies. Procurement procedures throughout the EU must include climate-related, social and other quality criteria. This promotes innovation by MSMEs and facilitates their access to public contracts. MSME organisations, chambers, academia, social partners and other relevant stakeholders should be an integral part of the process.

([9]) TRL: Technology Readiness Levels are different points on a scale used to measure the progress or maturity level of a technology.
([10]) OJ C 123, 9.4.2021, p. 30.
([11]) OJ C 123, 9.4.2021, p. 22.
([12]) OJ C 486, 21.12. 2022, p. 1.

4.4.5. The EESC calls for close cooperation between education providers and MSMEs in shaping training to meet the competences and skills needed in the green transition, including by upskilling and reskilling employees and entrepreneurs alike. Moreover, the EESC advocates supporting innovation activities for MSMEs by incentivising and facilitating cooperation with other businesses, their organisations, chambers, universities and research organisations.

5. **General promotion of a fair and inclusive transition**

5.1. *Just transition*

5.1.1. A 'just transition' entails measures and social policy interventions that accompany the transition towards a sustainable, carbon-neutral economy and production system. The EESC underlines that the 'just transition' is not just a question of financing the transition. It also includes the objective of safeguarding workers' rights, creating decent work, quality jobs and social security, strengthening democratic participation (including at company level), and maintaining and further increasing the competitiveness of European businesses, and requires specific action at all levels, particularly at regional level.

5.1.2. Employment in those key sectors that are particularly affected by environmental modernisation and the industrial revolution towards a climate-neutral Europe is facing major upheaval that makes reskilling and educational investments in high-quality green jobs essential. In this context, the provision of up-to-date knowledge and educational rights are just as relevant as the continuous promotion of the acceptance of women in technical professions.

5.1.3. The measures and various stages of the transition set out in the Fit for 55 package may lead to huge changes in the economy and social disruption. The EESC therefore calls on the Commission to pay more attention, when evaluating NECPs, to the adequacy of the just transition strategies and, in particular, to assess the extent to which the following objectives have been achieved:

— facilitating employment transitions;

— supporting workers who lose their jobs as a result of decarbonisation (at the very least, a lost job should be compensated for with another, equivalent job);

— developing the regional economic potential arising from renewable energy sources and new forms of participation in electricity production;

— effectively combating energy poverty.

5.1.4. The EESC calls for close cooperation between training providers and businesses in designing training to provide the skills and competences needed for the green transformation of the economy, including through upskilling and retraining workers and entrepreneurs.

5.1.5. As expressed in earlier opinions ([13]), the EESC is convinced that not only must the resources for social and regional cohesion and recovery be deployed so as to support climate mitigation and the energy transition, but climate and energy policies must also be configured so as to further social and regional cohesion. Such strategies already exist, such as projects for building solar farms on former lignite mining sites in Portugal and Greece, or the very strategic support for prosumers in Lithuania. But these examples are far from common practice or mainstream.

5.2. *Enabling private investment*

5.2.1. Individual Member States need programmes for the bottom-up development of renewable energy resources, which are indispensable for the energy transformation and significantly affect both the quality and, above all, the prices of supplied energy. As a result of the increase in energy prices (coming from national electricity networks), there is already a tendency to independently satisfy the energy needs of businesses for which green energy has become a matter of survival.

([13]) See OJ C 47, 11.2.2020, p. 30 and OJ C 62, 15.2.2019, p. 269.

Many companies are already dynamically investing in their own renewable energy and heat sources. As these sources are cheaper, they are also attractive to local companies and communities that could use the surplus energy fed into the electricity grid. Unfortunately, the systems in many parts of Europe need development and are currently unprepared to accept numerous new installations. Moreover, these private investments would very often not need to be focused only on a single company's needs — they could provide benefits to local communities.

5.2.2. The problem in the development of the renewable energy sector seems to be a dynamic increase in power in the sector over an extremely short period of time, which is a big challenge for domestic power systems in the Member States, despite significant investments in modernising the network and increasing the systems transmission capacity. Europe now needs to develop local energy communities, where local governments have a dominant investment role. These are so-called energy cooperatives, formed with the participation of residents and often financed by local investment funds. This form of involving local societies in the energy transformation ensures support for these initiatives and minimises the risk of social resistance to locating generation, distribution or transmission installations in the local area.

5.2.3. Such initiatives should be included in EU regulations as soon as possible and supported by a state funding system for this type of investment. In this case, commercialising medium and low-voltage lines in the power grid is critical so that the grid infrastructure can also be built with the participation of private investors. The development of civic photovoltaics shows the great investment potential of society and entrepreneurs. Appropriate legislation in this area would solve both financing problems and problems with connecting such investments to the electricity system.

5.3. *Energy poverty*

5.3.1. Ensuring equal access to energy and the security of energy supply at affordable cost must be an absolute priority for the EU and its Member States. With the spike in energy prices, more and more EU citizens and consumers are being affected by energy poverty across Europe. Those who were already facing energy poverty are seeing their situations worsen, and consumers who in the past did not face issues in paying their energy bills are at risk of falling into poverty.

5.3.2. Considering the importance of the issue, the EESC urges the EU to promote a common approach to energy poverty. Currently, each Member State can define the term energy poverty according to its own criteria, and the lack of a common approach could lead to a situation where the Commission is not able to assess the situation adequately and Member States do not understand the same thing by it and react differently. The definition provided in the proposal for a recast of the Energy Efficiency Directive and the indicators previously established by the European Energy Poverty Observatory (EPOV) are a good start. Given the urgency of the issue, the EESC believes that the Commission and the Member States need to promote a common approach that provides a specific common understanding of energy poverty and enables the collection of statistical data.

5.3.3. The EESC stresses the importance of investing in fair and efficient energy supply in order to alleviate energy poverty in the long term. To achieve this, it is important to ensure that investments in renewable energy and energy efficiency, as well as comprehensive building renovations, support the lowest-income groups. Only by ensuring that financially weaker households have the means to make necessary investments can prosumers achieve 'strategic autonomy' for themselves personally or as part of a community with others — ultimately the most sustainable way of overcoming energy poverty.

5.3.4. In this connection, the EESC reaffirms its position that a two-tier energy society is to be avoided at all costs. We cannot have a situation in which only affluent and technologically well-equipped households benefit from the energy transition and all the rest have to bear the costs. The EESC therefore supports the incentives and tools for implementation of the Energy Efficiency Directive to help vulnerable customers and households, and points out that ambitious targets for district heating/cooling may worsen the conditions of social housing. The Committee therefore welcomes the proposal to create the Social Climate Fund, and calls for compliance with the 'just transition' principle so as to take into account the different situations of Member States.

5.3.5. As energy poverty is rooted in general poverty, it is also essential that the Commission and Member States continue to focus on reducing poverty overall. This crisis highlights the need to continuously improve access to employment and social inclusion, to ensure an adequate standard of living and to foster economic growth in Member States.

5.4. *Rural areas*

5.4.1. The EESC believes that a combined strategy for the energy transition and digitalisation in rural areas has not received the expected level of attention and support. It calls for the swift implementation of the Commission's long-term vision for the EU's rural areas and the mobilisation of stakeholders through the EU Rural Pact.

5.4.2. The EESC has repeatedly pointed out that the energy transition (the shift away from large, centralised production facilities to more decentralised structures) offers real opportunities for new sources of income and new jobs in rural areas ([14]). Here, too, the Committee is very disappointed with the ideas put forward so far by the European Commission and the Member States.

5.4.3. The role of local and regional energy communities therefore has to be acknowledged and leveraged to achieve a just energy transition combined with community development, through the establishment and scaling up of citizen energy communities comprising the voluntary coming together of citizens, local authorities and MSMEs to promote social and economic benefits.

5.4.4. The EESC concludes that the deployment of digital technologies in rural areas is an essential requirement to support the energy transition. The rural energy system must be decentralised, which implies a huge need for more and better interconnection, which of itself requires the deployment of digital technologies to match supply and demand and ensure efficient energy flows.

6. **Specific comments**

6.1. Keeping a sound industrial base within the EU will secure prosperity, quality jobs and a commitment to fighting climate change for European society. European industry must invest in Europe, in both R & D&I and plants and equipment, in order to keep its competitive position. This requires a proper regulatory framework.

The energy industry represents a very large sector of the economy. One particular feature of this sector is that it is a key lever for other economic sectors. However, all aspects of the energy sector are very stereotyped in terms of gender, with men in a dominant position, which leads to major career imbalances between men and women in both the public and private energy sectors ([15]).

The EESC recommends:

— strengthening and enforcing existing legislation on equality at both EU and national level;

— creating a level playing-field for training in energy-related careers in the Member States and at European level and setting up a European STEM College;

— ensuring labour market equality in the energy sector by exploring opportunities for women, while at the same time preventing the energy and digital transitions from becoming traps for women's careers and wages, and developing social dialogue and collective agreements on equality in energy companies across Europe.

Brussels, 26 October 2022.

The President
of the European Economic and Social Committee
Christa SCHWENG

([14]) OJ C 367, 10.10.2018, p. 1.
([15]) UN Sustainable Development Goals 5, 7 and 8; Joy Clancy, University of Twente, *Give women a chance: engendering the energy supply chain*.

ANNEX

The following amendments, which received at least a quarter of the votes cast, was rejected during the discussion:

Point 2.6

Amend as follows:

Section opinion	Amendment
The current energy (price) crisis and the lack of security, stability and predictability in supply are putting a huge strain on the European Union. The crisis would be less severe if more targeted action had been taken earlier and, for example, if the EU's own objectives (such as those of the European Energy Union) had been taken more seriously. The EESC welcomes the measures proposed in the REPowerEU communication and the REPowerEU plan to ramp up green energy production, diversify supply and reduce demand for Russian gas, as the solutions they put forward are in line with the objectives of the Green Deal and the European Energy Union. In the Committee's view, this should ***not primarily*** be a question of diversifying ***dependencies but rather,*** as far as possible, of 'strategic energy independence and autonomy'. When it comes to resources to replace Russian gas, the EESC warns that the EU must take particular care with regard to the impact of these resources on the environment, and to new dependencies on third countries which do not share European values.	The current energy (price) crisis and the lack of security, stability and predictability in supply are putting a huge strain on the European Union. The crisis would be less severe if more targeted action had been taken earlier and, for example, if the EU's own objectives (such as those of the European Energy Union) had been taken more seriously. The EESC welcomes the measures proposed in the REPowerEU communication and the REPowerEU plan to ramp up green energy production, diversify supply and reduce demand for Russian gas, as the solutions they put forward are in line with the objectives of the Green Deal and the European Energy Union. In the Committee's view, this should be ***primarily*** a question of diversifying ***resources and ensuring*** as far as possible, of '***open*** strategic energy independence and autonomy'. When it comes to resources to replace Russian gas, the EESC warns that the EU must take particular care with regard to the impact of these resources on the environment, and to new dependencies on third countries which do not share European values***. At the same time, in the current situation, we must keep all our working energy sources, because in fact, the danger for us right now is not the possible impact of substitute sources on the environment, but the lack of energy and power outages. Energy production capacity that currently supplies the European energy market cannot be lost***.

Outcome of the vote on the amendment:

Votes in favour: 77

Votes against: 113

Abstentions: 14

Point 4.3.1

Amend as follows:

Section opinion	Amendment
The green transition in the manufacturing industry needs a basis of a sufficient, stable, proper mix of renewable energy for electrification and for the production of ***green*** hydrogen to succeed. Storage technologies are being developed and the opportunities offered by digitalisation are being fully exploited. There is therefore still a considerable need for research and development.	The green transition in the manufacturing industry needs a basis of a sufficient, stable, proper mix of renewable energy for electrification and for the production of hydrogen to succeed. Storage technologies are being developed and the opportunities offered by digitalisation are being fully exploited. There is therefore still a considerable need for research and development.

Outcome of the vote on the amendment:

Votes in favour: 92

Votes against: 112

Abstentions: 9

Point 4.3.4

Amend as follows:

Section opinion	Amendment
There is absolutely no doubt that ***green*** hydrogen will contribute in the future to a secure European energy system. The EESC refers to its opinions on the hydrogen strategy [1] and the strategy for energy system integration [2].	There is absolutely no doubt that hydrogen will contribute in the future to a secure European energy system. The EESC refers to its opinions on the hydrogen strategy [1] and the strategy for energy system integration [2].
[1] OJ C 123, 9.4.2021, p. 30. [2] OJ C 123, 9.4.2021, p. 22.	[1] OJ C 123, 9.4.2021, p. 30. [2] OJ C 123, 9.4.2021, p. 22.

Outcome of the vote on the amendment:

Votes in favour: 92

Votes against: 112

Abstentions: 9

Point 1.4

Amend as follows:

Section opinion	Amendment
The potential that Europe has in the field of renewable energies must be identified as accurately as possible and communicated widely in order to promote a common understanding of the extent to which independence from energy imports can be achieved. In particular, the electrification of the heat and transport sectors and the need for domestically produced ***green*** hydrogen must be taken into account.	The potential that Europe has in the field of renewable energies must be identified as accurately as possible and communicated widely in order to promote a common understanding of the extent to which independence from energy imports can be achieved. In particular, the electrification of the heat and transport sectors and the need for domestically produced hydrogen must be taken into account.

Outcome of the vote on the amendment:

Votes in favour: 92

Votes against: 112

Abstentions: 9

Point 1.6

Amend as follows:

Section opinion	Amendment
At the same time, short- and possibly also medium-term measures will be necessary to compensate for lost energy supplies from Russia. LNG imports are one such measure. The EESC thinks it important, however, that this does not create new long-term dependencies on fossil fuels. This must be taken into account in advance in the investment cycle. Overall, the aim is ***not*** to diversify dependencies***, but*** to achieve the highest possible level of 'strategic autonomy'.	At the same time, short- and possibly also medium-term measures will be necessary to compensate for lost energy supplies from Russia. LNG imports are one such measure. The EESC thinks it important, however, that this does not create new long-term dependencies on fossil fuels. This must be taken into account in advance in the investment cycle. Overall, the aim is to diversify ***the sources and at the same time to decrease the high*** dependencies ***on one importer in order*** to achieve the highest possible level of ***open*** 'strategic autonomy'.

Outcome of the vote on the amendment:

Votes in favour: 77

Votes against: 113

Abstentions: 14