

## Competition Policy supporting the Green Deal

### EREF contribution on State Aid Control

#### Introduction

EREF is the European federation of national renewable energy associations from across EU Member States, representing all renewable energy sectors. For more than 20 years, the Federation defends the interests of independent power, fuel and heat production from renewable sources, and promotes giving non-discriminatory access to the energy market. EREF strives to create, maintain and further develop stable and reliable framework conditions for renewable energy sources, strongly advocating for the full decarbonisation of the European energy systems and markets, which need to be transformed and based on 100% decentralized generation from renewable sources.

The European Commission's President, Ursula von der Leyen, has called for greater ambition and stronger targets in her European Green Deal, introducing the first European Climate Law to enshrine a carbon-neutral commitment by 2050, with MEPs calling for a 60% GHG emissions reduction by 2030. The European Commission's Impact Assessment is suggesting to increase its 2030 renewable energy target from 32% up to 38-40%.

The Member States must significantly accelerate and increase the volume of the uptake of all available renewable energies on their territory and strive for an integrated energy transition, which includes all sectors. For this to be achieved, it is an inherent part of the current energy legislation that the renewable energy sector and in particular independent renewable energy producers as well as citizens, renewable energy communities and prosumers can rely on a stable legal framework and clear, robust national support schemes in the EU Member States.

First of all, it is important that the environmental and climate imperative is given the highest priority and consideration. Europe has only 9 years to drastically reduce the GHG emission level by 2030 and to achieve a complete reduction of 100 % by 2050. The European Parliament just recently and within the legislative procedure for a new EU Climate law called for a minimum 60 % GHG reduction in the EU by 2030, thus 5% more than the current proposal of the European Commission. The forceful climate ambition of Europe implies that the rapid deployment of renewable energies and strong sector coupling mechanisms are of overall public interest in the EU and its Member States.

Support mechanisms for renewable energies and related energy system change technologies must be defined from now on as matters of "public interest". With an adequate support design and answering to the established Altmark Trans Criteria of the ECJ (Case C-280/00 ), most of these support mechanism under public interest design would therefore no longer be

evaluated under the state aid scrutiny, thus saving enormous amount of time and creating robust investment security in an economy needing to recover from the current pandemic. The criteria for this service of public interest should be fine-tuned by a specific energy system change agenda under a Council Regulation following Art. 107 TFEU.

Only for specific cases, such as very large projects in offshore wind or where renewable energy support might not fulfil the Altmark Trans criteria, would we need modernised and updated State Aid Guidelines for energy to further enhance the pathway towards our climate targets.

The current State Aid Guidelines on Environmental Protection and Energy (EEAG), published in 2014, were set to be revised in 2020; however, the European Commission has now extended the guidelines until 2021. The EEAG shook the foundations of the energy market by widely side lining schemes based on well-established feed-in tariffs and premiums in favour of preferably technology-neutral bidding processes. While the EEAG foresaw exemptions from tendering and auctions, it championed these as general provisions compatible with the internal market.

The European Court overturned a decision<sup>1</sup> by the Commission, which had previously declared the German feed-in scheme of EEG 2012 incompatible with the internal market. This indicates that there may still be room for considerable improvement and for Member States to apply support schemes based on minimum prices in or outside state aid regulation. The application of general economic interest rules would further foster flexibility outside state aid scrutiny and accelerate legal and administrative processes and thus speed up the energy transformation. Experience from other sectors such as public transport and the related EU regulation (REGULATION (EC) No 1370/2007) of the European Parliament and of the Council of 23 October 2007 on public passenger transport services by rail and by road could serve as a starting point in establishing criteria for public service obligations (PSO). As mentioned, the Court of Justice of the European Communities in Case C-280/00 (Altmark Trans GmbH) ruled that compensation for public service does not constitute an advantage within the meaning of Article 107 of the Treaty, provided that four cumulative conditions<sup>2</sup> were satisfied.

Moreover, in the case of public service, respectively Service of General Economic Interest (SGEI), the European Commission, the European Parliament and the Council should also look

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<sup>1</sup> Case C-405/16P, Federal Republic of Germany v European Commission. 28 March 2019.

<sup>2</sup> The four criteria are set as follows:

- the recipient undertaking must have public service obligations and the obligations must be clearly defined;
- the parameters for calculating the compensation must be objective, transparent and established in advance
- the compensation cannot exceed what is necessary to cover all or part of the costs incurred in the discharge of the public service obligations, taking into account the relevant receipts and a reasonable profit;

Where the undertaking which is to discharge public service obligations is not chosen pursuant to a public procurement procedure which would allow for the selection of the tenderer capable of providing those services at the least cost to the community, the level of compensation needed must be determined on the basis of an analysis of the costs of a typical well-run company.



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into modernising the current “Guide to the application of the European Union rules on state aid, public procurement and the internal market to services of general economic interest, and in particular to social services of general interest”. EREF asks the Commission to reform these guidelines so that they are compatible with climate policy.

## **1. What are the main changes you would like to see in the current State aid rulebook to make sure it fully supports the Green Deal?**

Before EREF will give its input to the state aid reform process, we would like to encourage the Commission to recognise the Energy System change under the Paris Agreement and the Green Deal as the probably most important change and effort ever encountered in the history of the Union. The EU and its Member States must develop and implement solutions, a complete system overhaul and to deliver on drastic GHG emissions reduction by 2030 and further rapid emissions reduction afterwards to achieve net zero by 2050 at the very latest. The Commission has made this urgency and importance very clear, in its various communications under the Green Deal agenda. The European and national planning for change is the most important general economic policy for the energy sector. It has nothing to do with single separated support mechanisms and stands above any state aid scrutiny.

As briefly detailed above in the introduction, it is the hour of sustainable general economic interest - planning and evaluation. The transformation towards a renewable energy based system is of highest common interest for the EU and the planet. Therefore, EREF urges the Commission to attach this importance to its debate and leave state aid rules only for very specific aspects of the energy system change. EREF is convinced that the enormity of the change needed goes far beyond any state aid consideration. All parts of society, all economic sectors will need to deliver jointly on this system change. The established rules of public service needs to be seen in the climate urgency context under a much broader priority than it was identified in the past, e.g just for specific non-profitable but societal importance services. In the climate emergency, the EU and the Member States in effect must try to keep the economy and society able to function sustainably beyond 2030 and certainly beyond 2050 and to mitigate the looming climate collapse with utmost efforts. This is much more than simply counteracting to market failure. Without the system change all markets might fail.

Society has placed a high demand on the respective service to deliver on our climate targets as the most urgent public interest. Rules for this pathway should be as flexible as possible under a strict target reaching agenda. There is no time to be subordinated to state aid scrutiny.

The Covid-19 pandemic must not become an excuse for delaying the necessary fundamental transformation of our societies and particularly our energy system towards more economic and environmental resilience. The Green Recovery Fund and all forthcoming resources on Union and national level need to be directed to successfully tackle the climate crisis – without delays caused by overly burdensome state aid rules, which would extend operations of carbon emitting and other environmentally harmful installations.

Despite the necessity for a complete overhaul of the State Aid regime and the need to widely exempt renewable energy and energy transformation projects from state aid scrutiny, EREF will nevertheless comment under the state aid logic in the following section.

The new sustainable energy world with significantly higher and eventually dominant renewable energy shares in the systems need Member States and the EU Commission to overcome the narrow-minded sector-specific perspective, and it requires a holistic view of an integrated energy transformation in all end-use sectors, including enabling policies and regulatory tools and frameworks.

The following is a set of recommendations for the revision of the EEAG, in order to accelerate the uptake of renewables in all Member States.

## **I. Technology-Specific aid must be the rule, not the exception**

Insisting that state aid be granted, as a rule, on a technology-neutral basis has had, in many Member States, the effect of funnelling support to projects that are advantaged in presenting winning bids. These projects, however, may not be the best adapted to the territory or to the specific system change needs of a specific locality and region. Each Member State has an energy mix, a specific grid and balancing situation, specific renewable energy roll-out and pathways, geographic and meteorological conditions, political and societal considerations and markets and regulatory frameworks which are unique to it. The design of support schemes and regulatory frameworks must take these into account in order for each Member State to be able to play to its renewable strengths, including the option of close regional and/or transnational cooperation. A balanced deployment of renewables because of technology-specific support schemes may, for many Member States, in fact be more cost efficient.

Where auctions are deemed necessary, a technology-specific design and more targeted tools like minimum prices, contracts-for-difference, feed-in-premiums or -tariffs etc. for distributed and community-based installations can adapt more easily to the specific needs and the actual costs of the technologies in the specific regions. Member States should be free to choose appropriate technology specific remuneration mechanisms at their own discretion in order to accelerate the deployment of their preferred mix of renewables in all sectors. In markets with high shares of variable renewable energies Member States should be allowed to use capacity payments for renewable energy and storage instead of remuneration for power generation.

Each technology has its own characteristics in terms of performance for the power system beyond the criteria of energy as system services and capacity guarantee. Technology neutral tenders are not able to deal with these requirements for power system stability.

## **II. Obligation for a bidding process must be phased out and replaced by long-term investment, securing promotion mechanisms such as feed-in mechanisms.-Where it remains implemented, it has to be designed more carefully**

The current auctioning systems throughout Member States and the relentless insistence on using this artificial dogma in the current State Aid Guidelines have sabotaged any chance for a rapid and flexible up take of renewables and moreover a coherent sector-coupling system change.

The following problems related to auctions have been identified:

Results from auctioning have shown low realisation rates due to various reasons, including but not limited to strategic/under-bidding and limited development of less mature technologies with Solar PV winning out in most technology-neutral auctions due to its low costs. However, Solar PV would not have become one of the cheapest energy forms, if technology neutral auctions had been introduced 10 years earlier. Solar PV also received considerable support through market development, in particular with the German feed in support system.

To reach the renewable energy targets every renewable energy project, with the requisite permission, will have to be utilised and developed. Therefore, there is a high risk that there are not enough projects to create the necessary competition for a cost-efficient auction. Alternatively, by creating an artificial shortening of the auctioned amount of MW to obtain enough competition, the fulfilment of the targets is endangered (or the targets are already set to low).

Therefore, Member States should be free to decide, just like in many other policy areas, through which system they grant support in order to find the most efficient pathway to achieve the European renewable targets by 2030 and not be obliged to use an auctioning system.

If, however a Member State decides that auctioning is the most efficient and effective way to reach the national targets that certainly should provide a fair share of the overall EU target, the bidding process has to be designed carefully:

It has become clear that the outcome of the auction depends heavily on the prevailing framework conditions such as the national renewables market, economic growth perspectives, and the existence of additional administrative and grid-related barriers. Auction design should be required to take these barriers and challenges into consideration in order to allow for the development of more innovative technologies with the potential for future cost reductions.

Primarily, these lessons strongly underline the need for Member States to conduct technology specific designs not only on an exemption basis. There needs to be greater

specification about which auctions should require prior building permission, about minimum penalties for late or no deployment. In addition, there should be – jointly or alternatively - clear rules for creating specific tenders for locally owned and/or distributed installations.

EREF clearly calls for an exemption from auctioning for energy communities and small and medium sized installations. Already the need for advanced permitting as a pre-condition to take part in an auction underlines the absurd situation, where there is a delay of up to 3 to 10 years because of the permitting procedure. Deciding in advance which maximum price may be the result of an auction is disproportionate.

Manufacturers face economic risks, if large shares of winning bids are not implemented. Risks of sunk costs due to heavy licensing procedure is a distortion between competitors and technologies. Moreover, it is a circular issue where parameters of the project design depend on the licensing trade-off between environment and social acceptance and on the other hand depend on the auction bidding in terms of price.

### **III. Small and Medium-sized energy producers and Cooperatives and Community Energy need appropriate regulation and support**

While SMEs are defined in Section 1.2 of the EEAG, they are only mentioned in optional provisions at different points in the rest of the guidelines. As far as renewables are capital intensive, the project cost of capital is a very significant parameter in auction competition. SMEs do not have the same access to capital financing as companies. Therefore, auctions without specific measures for SMEs are a distortion between competitors. That is why winners of recent auctions are primarily big companies. This is an even bigger problem, when competing companies are (at least partly) state owned, which - compared to private SMEs - reduces their financial risk and resulting financing costs dramatically. Access to finance for SMEs could be greatly enhanced with a chapter specifically on the types of aid for SMEs.

In order to further specify the need for SMEs and Communities to be granted a clear, transparent and enabling framework, aid for Cooperatives, as well as Citizens and Renewable Energy Communities (CECs and RECs) should be dealt with in a separate chapter. They are structurally different from SMEs – although many of these communities constitute SMEs as per the Commission Recommendation on the definition of SMEs (2003/361/EC) of 6 May 2003. This broad definition seems to be outdated and needs to be adjusted to the specificities of the actual cooperatives, energy and citizens energy communities. It is important to note that there has been a noticeable decrease in participation of Renewable Energy Communities due to the transition from feed in tariffs to competitive bidding; this has pushed them out of the market and made it more difficult to obtain investment. Specific rules should clarify that – and under which conditions – direct support via FIT/FIP, net-metering, self-consumption is allowed.

RED II has recognised the importance of RECs, indicating that in order to achieve the targets for 2030, 2040 and 2050 citizens will be at the heart of the energy transition. Therefore, it is crucial that the transposition of Articles 21 and 22 of the RED II takes place and that an enabling legal framework removes the obstacles for energy communities. This in part, includes allowing Member States to provide support for local and community ownership of renewables in a manner that is most appropriate and free from State Aid rules. The European Commission must allow Member States to make nationally appropriate decisions on which sectors, territories and technologies they choose to support.

Local opposition to RES projects has a serious impact on RES development. The encouragement of citizen participation in and ownership of renewable energy projects is crucial, as it will lead to an overall increase in public support for these projects. Therefore, barriers such as mandatory auctioning should be removed and replaced by a system that might combine auctioning schemes - in case a Member State wishes to use auctioning schemes – with tools to encourage community and cooperative participation and engagement for small and medium sized projects outside auctioning in general.

Renewable energy communities must also enable citizens and businesses to cooperate, thus facilitating economically viable business cases by reducing administrative barriers and inappropriate network charges and provide full transparency and adequacy of fees and taxes. These communities can only function successfully if both citizens and businesses see some benefit.

Revenue sharing is an example of citizen's participation and ownership, whereby the community buys the rights to receive a proportion of the revenue or profit from a commercial renewable energy project. This encourages the developer to work with the community and ensures both parties receive a benefit from the RE project.

#### **IV. Integrated Renewable Energy Projects (IREP) should be encouraged and supported**

Support schemes have emerged which provide aid to project packages that combine a number of individual projects and/or technologies, which jointly can significantly secure and enhance the system transformation by providing security of supply, including auxiliary, balancing and other system services. Such combined renewable energy projects include renewable installations of different supporting technologies and sources such as storage as well as grid and system improvements and community participation. Good practice examples of such integrated projects/packages and their support should be promoted in order to encourage these highly beneficial initiatives EU-wide.



Encouraging and supporting the development of integrated renewable energy projects would not only accelerate system integration of various RE technologies including across different sectors, but it would also accelerate the necessary system transformation towards a stable, reliable, integrated and affordable renewable energy system.

## **V. Complementing the CO<sub>2</sub> price with a reimbursement mechanism for citizens and SMEs**

Research has suggested that a CO<sub>2</sub> price combined with a reimbursement mechanism for citizens, such as lowering their electricity tariffs or reimbursing a fixed amount, could help achieve the desired effect of rendering emitting industries more expensive while protecting low-income citizens. This would also enable SMEs to move faster towards sustainable energy supply and demand and thus broadly increase public support for the GHG reduction policies. Complementing such a CO<sub>2</sub> price with policies and tools such as removing subsidies and phasing out/ruling out fossil-fuel based technologies like oil and fossil gas driven heating systems, or promoting the uptake of clean technologies, such as encouraging renewable energy driven heat pumps, boosting the sale of electric vehicles and accelerating/requiring renewables based charging infrastructure. These additional features of the CO<sub>2</sub> pricing would help reduce the costs of the energy transition borne by citizens.

## **VI. Cross-border opening of support schemes to facilitate decarbonisation**

The current Renewable Energies Directive 2009/28/EC (RED) as well as the new Recast Directive 2018/2001/EU (RED II) encourage pathways to cross-border cooperation. In theory, there are considerable benefits to the cross-border approach such as reducing overall RES support costs, allowing Member States to make use of the renewable resources available while also encouraging them to attain and exceed their national targets. However, due to differing policy and regulatory environments throughout the Member States there may be an added economic burden.

Policymakers should encourage (but not require) the most efficient use of renewable resources available throughout the EU by reducing investment risks. The revision of the EEAG should introduce possibilities for encouraging specific promotion programmes by Member States and the EIB in order to promote cooperation, including statistical transfer schemes within the EU. EREF welcomes the new Commission Implementing Regulation (EU) 2020/1294 of 15 September 2020 on the Union renewable energy financing mechanism as an additional deployment mechanism for new renewable energy projects. The aim is to fill any gap in the indicative Union trajectory, pursuant to Article 33 (1) of the governance regulation (EU) 2018/1999, and to contribute to the enabling framework, pursuant to Article 33(2) of this

regulation, thereby supporting renewable energy deployment across the Union. Nonetheless, the major efforts have to be structured and realised in each EU Member State.

## **VII. A smooth and clear transition between regulatory frameworks**

A stable and predictable legal framework is a key factor in every decision-making process including for investments in RES projects. Currently investors face the problem of a gap between the existing regulatory framework, involving the support schemes for RES projects, which soon will no longer be valid, and the future framework which is still unknown, not to mention its transposition into national systems. Such a period of limbo creates uncertainty for investors and slows down the uptake of renewables. It affects mostly renewables that are subject to longer administrative formalities. Therefore, the revision process of the EEAG must be completed as quickly and efficiently as possible.

2. **If you consider that lower levels of State aid, or fewer State aid measures, should be approved for activities with a negative environmental impact, what are your ideas for how that should be done?**

The introduction of the European Green Deal and other climate-orientated policies and legislation mean that the EU and its institutions are legally bound by carbon reduction objectives. All support to fossil fuels must be phased out immediately, as these subsidies continue to go against the policies and legislation set out above, and obstruct any progress towards a carbon neutral 2050. The EU cannot legitimately allow Member States to grant public money to fossil fuels, or other carbon-intensive activities. All State aid– whether or not explicitly environmentally-focused – would need to be screened to ensure the minimisation of climate harm.

The Commission should seek evidence of the environmental law compliance of the project/activity benefitting from the aid and conduct a prima facie analysis of whether an aid measure is directly or indirectly increasing GHG emissions. For aid measures that would directly or indirectly yield a substantive increase in greenhouse gas emissions, the Commission should

- systematically assess consistency of State aid measures with the net zero pathway
- seek evidence that relevant environmental impacts have been assessed, and their conclusions
- condition granting of aid to a credible business plan to align the beneficiary's activities with climate targets
- ensure transparency , publication , monitoring and enforcement of the business plan

- a. **For projects that have a negative environmental impact, what ways are there for Member States or the beneficiary to mitigate the negative effects?**

Climate change is the greatest threat to biodiversity. Causes of climate change and the threat to biodiversity lie especially with intensive and polluting agriculture, deforestation, fossil fuel and nuclear use. All of these factors alone add to the loss e.g. of biodiversity, be it overheating of rivers due to cooling stations from nuclear and fossil power plants, heavy transport emissions, emissions from burning of coal and gas and emissions from an agriculture, using fertilizers and creating NOX burdens on the environment, including riverbeds and water. Small and medium sized hydropower stations, sustainable onshore wind, PV and other renewable technologies can completely replace these polluting practices, while at the same time increase energy production.

Renewables are helping to heal the environment and increase biodiversity. It may be difficult to exclude all damage, whether it be to a specific bird or fish species for example, by using

renewable energy technologies. However, there are more and more technical solutions being developed for renewable energy projects that enhances their sustainability (e.g. fish passages or bird detection) and which are already a part of normal project operation. These technologies should be further improved, newly developed, i.e with state support for related R&D.

Sound and sustainable but swift and efficient renewable energy project planning, authorisation and management in line with EU regulations for nature protection is urgently needed in order to reach the goal of a net zero GHG emissions in 2050. EREF is alarmed that under the guise of nature protection there is still the long-standing agenda of restricting renewables, especially independent power production from renewable and community projects, for the sake of prolonging unsustainable technologies and hindering the energy system change towards a largely decentralised energy system. The objectives of nature protectionism cannot be misused as a restorative pathway for fossil fuels and nuclear.

**3. If you consider that more State aid to support environmental objectives should be allowed, what are your ideas on how that should be done?**

EREF insists that the established guidance for state aid approval is maintained and even strengthened:

As the Commission rightly outlines, the assessment of the compatibility of an aid measure has “traditionally been about balancing its negative effects on trade and competition in the common market with its positive effects in terms of a contribution to the achievement of a well-defined objective of common interest.” The Commission sets out the balancing criteria as follows:

- “The aid measure must be aimed at a well-defined objective of common interest.
- The aid must bring about a material improvement that the market cannot deliver itself, for example by remedying a market failure or addressing an equity or cohesion concern.
- The aid must be an appropriate policy instrument to address the policy objective concerned.
- The aid must have an incentive effect, i.e. change the behaviour of the undertaking in such a way that it engages in additional activity that it would not carry out without the aid.
- The aid measure must be proportionate, i.e. limited to the minimum necessary to induce the additional investment or activity.
- The distortions of competition and effect on trade between Member States must be sufficiently limited, so that the overall balance is positive.
- The relevant decisions and information about the aid awards must be made public (transparency).”

These principles have to be respected. It is disconcerting that the Commission in a footnote refers to a single decision notification and the subsequent legal dispute concerning nuclear power and new build support in the United Kingdom. This case is based on the EU rules of single notification. Nuclear power does not fall under the current State Aid Guidelines for environmental protection and energy. The last discussion and consultation in the run-up to the current State Aid Guidelines clearly came to the conclusion that the majority of Member States, the renewable energy industry sector as well as environmental NGOs did not want renewable energy in the same guidelines with nuclear energy. Therefore, there is some confusion as to what the Commission means with its referral in footnote 2 of the document: “The possible impact of the ruling by the Court of Justice in case C 594/18 P, Austria v Commission, (hereinafter “Hinkley Point”) of 22 September 2020 will need to be considered.”

The only impact - and falling outside of the state aid discussion- of the judgment by the ECJ is to rapidly start the revision of the EURATOM treaty in order to reach a level playing field for renewable energies in the market. Also to correct a set of outdated preconditions under the treaty, such as the serious democratic deficit. There is no place for the introduction of the EURATOM /State Aid debate into the revision of the State Aid Guidelines.

- a. Should this take the form of allowing more aid (or aid on easier terms) for environmentally beneficial projects than for comparable projects which do not bring the same benefits ("green bonus")? If so, how should this green bonus be defined?**

In order to reach the climate targets there is an urgent need for greater flexibility in allowing Member States to support renewable energy projects.

If the mandatory use of auctions is not lifted, an alternative to the specific auction design for energy communities or other small and medium sized installations could be for Members States to have the right to grant direct support (e.g. guaranteed minimum prices and premiums) to community based and/or (partly) locally owned installations, up to a clearly defined capacity, covering small and medium sized projects in general.

In the past, (including in the EEAG 2014-2020) a capacity of 1 MW for most renewable technologies seemed to be a reasonable approximation, with the exemption of wind power, where 6 turbines of an average capacity (at that time 3 MW) were considered appropriate by EC/DG COMP. Due to the climate urgency and to the development of the technologies, these thresholds should be raised to 10 MW for most renewable technologies and for wind energy 10 turbines with a capacity of 6 MW each. This 6 MW size per turbine will be the standard within the period of the next 5 years. These projects are within the possible limit that medium sized companies can realise.

- b. Which criteria should inform the assessment of a green bonus? Could you give concrete examples where, in your view, a green bonus would be justified, compared to examples where it would not be justified? Please provide reasons explaining your choice.**

The criteria for the assessment of a green bonus is set out in the goals and targets of the Green Deal and the accompanying policies and legislation. The Green Deal should be used as a roadmap to guide the revision of the State Aid Guidelines towards ensuring that the activities that directly assist in achieving these goals and targets are supported, and those that directly or indirectly hinder/obstruct the achievement of these goals should no longer receive the state aid.

For example, under REDII the promotion of renewable energy communities and self-consumption has been identified as a crucial step towards achieving the 2030, 2040 and 2050 targets, placing citizens at the heart of the transition. Therefore, under these circumstances a green bonus would be justified. As set out above, this green bonus could take the form of providing direct support to these projects and smaller renewable energy projects.

An example of where the green bonus should not be eligible is for the promotion and development of hydrogen other than green, renewable hydrogen. The Hydrogen Strategy plans for the wide implementation of green hydrogen by 2050, however, in order to reach that target, other types of hydrogen such as pink, grey and blue hydrogen will be developed and used over the coming decades. Pink hydrogen is produced using nuclear electricity, whereas grey and blue hydrogen is produced using fossil fuels and still emits considerable GHGs. It is vital that the EU supports and develops renewable hydrogen only, ensuring that it comes from all available sustainable renewable sources, be it wind, sun, hydro, biogas, etc. EREF realises the potential use of green hydrogen in industry, air transport and shipping. Albeit, there should be a focus on a domestic and regional green production and consumption pathway.

All other non-green investment pathways set out under the EU Hydrogen Strategy should be abandoned, as they would delay the energy transition away from fossil fuels and consequently the full decarbonisation of the EU well before 2050. These emitting and unsustainable sources will only lead to a drain on research and roll-out financing from the renewable and efficiency sector for the benefit of the incumbent energy sector, and to the detriment of the transformation towards a carbon neutral economy, thus creating a vicious circle at an EU-wide and global level, while the climate crisis is worsening.

- 4. How should we define positive environmental benefits? a. Should it be by reference to the EU taxonomy<sup>3</sup> and, if yes, should it be by reference to all sustainability criteria of the EU taxonomy? Or would any kind of environmental benefit be sufficient?**

Positive environmental benefits find their base in our EU Treaties (except in the EURATOM treaty) and in established EU directives and regulations. From this book of rules there is a whole set of indicators for positive environmental benefit analysis, e.g. with our Environmental Impact Assessment tool- set at the forefront. The new Taxonomy Regulation uses the guiding principles of polluter pays and responsibility, sustainability and no harm principles. A reference to the taxonomy is helpful but only if the reference refers without exception to all sustainability criteria in the Taxonomy Regulation.

EREF expresses concern and alarm over the possibility of fossil gas and nuclear energy finding their way into the taxonomy through the misuse of the delegated act provisions under the Taxonomy Regulation. However, so far, the expert groups who advise the Commission, the Commission itself as well as the majority in the European Parliament and Council refuse allow this to happen. EREF hopes that the upcoming reports from the current expert analysis under the authority of the Joint Research Centre, the traditional nuclear research unit of the EC, will not open the door for these technologies to benefit from the taxonomy regulation.

For further information on EREF's position on the revision of the State Aid Guidelines for environmental protection and energy please find our position paper attached in annex.