



WCRE

World Council for Renewable Energy



EU 4.0 WHITEPAPER

REGENERATIVE EUROPE 2020

FOR A EUROPE OF 100 % DISTRIBUTED RENEWABLE ENERGIES



Draft paper - your inputs are highly welcome.

Please contact ines.bresler@eurosolar.de with your ideas and contributions.

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ENERGY TRANSITION AS A PEACE PROJECT – HIGH PROMISE, SLOW PROGRESS

EUROSOLAR was chartered in 1988 with pursuing the Solar Age for Europe and the world, to help create the conditions for economies and societies prospering without fossil and nuclear energy. While the three decades since have been a period of extraordinary progress in the renewables world, too much lip service has been paid, while campaigns conducted by the dominant incumbent industries, fossil and nuclear, helped slow, even reverse progress. Painful delays exacerbated by failed emission pricing, trade and climate protection measures meant that the climate balance of the planet begun to tilt, predictably and dangerously. Today we have reached a time of exponentially rising CO₂ concentrations in the earth atmosphere where the negative carbon economy – a ‘climate-positive’ economy that absorbs more atmospheric carbon than it emits – has become an existential goal.

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100 percent renewable energy targets have become essential and are no longer sufficient on their own, and zero carbon targets are not set low enough: they need to aim below zero. The central challenge today is to bring about the regenerative economy, based on a fully renewable energy supply as a fundamental condition, as the meaning and goal of all economic-technical activities. 100 percent renewable energy targets have become essential and are no longer sufficient on their

own, and zero carbon targets are not set low enough: they need to aim below zero. The central challenge today is to bring about the regenerative economy, based on a fully renewable energy supply as a fundamental condition, as the meaning and goal of all economic-technical activities.

The focused and swift transformation to a 100 percent renewable Europe is long overdue. The continuation of slow and complicated ‘low carbon’ policy in response to ‘climate change’ means succumbing to Orwellian Newspeak. To call the climate catastrophe triggered by fossil energies ‘change’ is euphemistic and damaging: the trivialisation conceals the seriousness of the situation and opens the door to the illusion that the current destabilization of the planetary climate is due to natural fluctuations. Similarly dangerous and short-sighted are solutions that ignore fair consideration of costs and risks or of the value of resilience and sufficiency. The best examples of this are nuclear solutions.

The foundation of the European Union was laid in 1950 with the aim of fostering peace and security: to end the long and bloody conflicts that shook the continent. Yet this very birth act – the Schuman Declaration – commenced a core reliance on unsustainable energy and industrial practices. These may have been understandable, even unavoidable at the time, but continue today even when they have become untenable – unforgivable, given what we know about our state of affairs, and fate. The persistent foundation on coal, oil, gas and uranium, despite some proclamations on emissions management and renewable energy targets is a schizophrenic habit that undoes the very peace and security aims underpinning Europe’s existence. Having identified the problem it is high time to rectify it.

Today the European Union needs a form of energy supply that is free, flexible and independent of the large corporate interests and foreign pressures. The renewable energy transformation as demanded by EURO-SOLAR empowers citizens to actively participate in the generation of electricity and heat. A secure and cheap supply of energy, independent of external factors and resistant to the arbitrariness of third parties, creates the basis for a new social cohesion in Europe. It makes energy affordable for all, creates jobs and makes viable economies possible. It creates a high quality of life in physical, environmental, economic and social aspects.

And it is only the beginning: today we need to regenerate natural systems and the economy – towards a climate-positive future in which carbon is reclaimed from the atmosphere. These tasks bring people together in Europe instead of setting them against each other. The great European regenerative shift, if tackled properly, can become a unifying moment for Europe.

The fundamental transformation of the European energy system brings added value and security benefits, jobs and innovation, saves billions in healthcare costs, and reduces geopolitical tensions.



EUROPEAN ENERGY POLICIES AND THE WORLD CLIMATE: TOWARDS A RENEWABLE EUROPE ACTION AGENDA

There is growing evidence that the effects of global warming, which are largely triggered by fossil fuels' emissions, are at best at the limit of the control implicit in the current objectives for reducing emissions and achieving renewable energy quotas. The concrete possibility of a global climate catastrophe with dramatic consequences for Europe and the world has now become clearly discernible and affordable - and is nevertheless largely ignored by politicians and the media. Most statements by the Intergovernmental Panel on Climate Change (IPCC) still spread misleading linear climate predictions, while the nonlinear reactions of the Earth systems and the exponential nature of concentration growth are observed and known throughout the IPCC and UNFCCC work.

In 2018, a series of climate tipping points will be clearly visible. Massive releases of Arctic and Siberian methane from melting permafrost and sea beds are emerging. The warming of the oceans has progressed so far that without massive changes the seas will soon begin to release CO₂ instead of absorbing it. The overexploitation of forests also deprives them of this ability. And the decline of the polar sea ice, which has long caused Arctic heat waves as a result of lower reflectivity, is also more than worrying. Other strong climate feedback mechanisms are the interruption of Asian monsoon rains or the escalation of global forest dieback. More than 15 climate tipping point mechanisms run the risk of being triggered or have already been activated.

A sudden climate shift may be unfolding, a time of rapid, non-linear but exponential climate changes that were predictable but nevertheless not taken into account in the official IPCC studies and UNFCCC climate agreements. It would result of the sheer explosive

eruption of greenhouse gases through the combustion of fossil resources and concomitant climate feedback effects. Without much faster and more far-reaching measures than discussed so far, it is not out of the question that global temperatures could rise much more substantially within a few decades than predicted. An effective climate policy must therefore not only be designed in such a way that it creates the structures for a completely renewable and decentralized energy supply from the bottom up – but also that it is implemented simultaneously and everywhere – even without global or Europe-wide agreements and common objectives.

The warming of the oceans has progressed so far that without massive changes the seas will soon begin to release CO₂ instead of absorbing it.

It is also no longer sufficient to rely on 100 percent renewable energy systems: these have now become an essential basis for even more far-reaching and regenerative measures. In addition to the immediate phasing out of coal, these include the urgently needed a radical reduction of oil consumption in all economies worldwide and a drastic conversion from an industrial, resource-intensive, land-clearing and ecosystem-depleting meat diet to a largely vegetable, sustainably secure food basis. The CAP, Europe's Common Agriculture Policy, is in desperate need of reform, away from destructive over-reliance on meat production, fossil fuel and chemical inputs and forest-destroying industrial expansion of agricultural production.



The lowering of CO₂ concentrations in the atmosphere has become a necessity. It can be supported by massive reforestation and regeneration programmes for wetlands on all continents and by the immediate cessation of rainforest deforestation. Increasing the organic humus content in urban parklands and agricultural

soils is also a possibility, as is the conversion of industrial agriculture to organic farming methods. Instead of burning organic waste, it should be anaerobically digested into biogas or pyrolysed into biochar – to boost agricultural soil’s carbon uptake potential from the atmosphere.



WHY DO WE NEED A NEW AND RENEWABLE ENERGY MARKET FRAMEWORK?

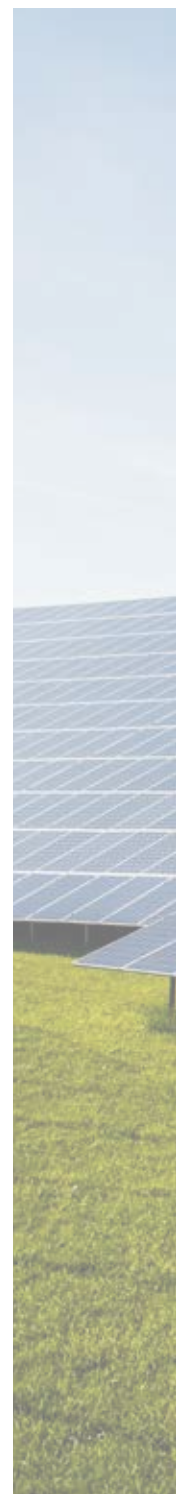
FROM THE IDEA OF THE ENERGY UNION...

Climate action at the European level is unfocused, ineffective and inadequate. In response, EUROSOLAR has designed transformation measures for the energy system at a much higher implementation scope and level of prioritisation. The actual situation shows that the EU policy as it is currently being implemented would perhaps have had a chance of success a generation ago if it had resulted in a 100 percent renewable reality today. Today the targets must therefore be very different. The targets on which the Commission, the Council and Parliament were able to agree remain far too timid and non-binding to finally put an end to the dominance of fossil nuclear interests. For this reason, EUROSOLAR advocates a New Energy Market Framework, which would make a secure and cost-effective energy supply possible and could accelerate a decentralised energy turnaround.

With the European Union's (EU) founding 2007 Treaty of Lisbon, amending the treaties of Maastricht (1993) and Rome (1957) the energy policy of the EU also became newly institutionalised in its current directions. The proclaimed aim of current European energy policy is to achieve an 'environmentally friendly, secure and economic' energy supply. In addition to 'diversification of energy sources energy saving and the promotion of renewable energy', the focus was also on the lowering of state subsidies. Measures concerning the choice between energy sources, i.e. the energy mix of the Member States, can only be taken unanimously. The EU is the largest energy importer in the world and the second largest consumer. Since only about 50 percent of the primary energy needs of the 28 member states are covered by European, largely fossil sources,

cooperation at European level is the basis for a secure energy supply from an EU perspective. For this reason, the Union should provide support for the ambitious transformation paths. At the same time, it will not be able to avoid exerting pressure on its members to end subsidies for fossil technologies. In addition, the old, centralised structures must be abandoned in order to support the states in the decentralised expansion of renewable energies.

The idea of the Energy Union was born in 2015, which was to link all actors more closely. Within this framework, fundamental questions on the different strategies of the 28 EU member states should be coordinated more closely. But experience shows: In most cases, however, conflicts of interest are not resolved by comprehensive strategies, but reduced by small, often inconspicuous, but problem-oriented progress. In its planned form, the Energy Union should clearly be used as a means of foreign policy. The framework strategy talks about improving opportunities „to assert their weight on the global energy markets“. With an energy union, the EU Commission wants to deepen the integration of the national energy and interconnected markets. The aim is to make the European energy sector less dependent on imports and to increase security of supply. However, a sustainable energy supply in Europe does not require a central bureaucratic energy union. Rather, a European Union for Renewable Energies would have to be created in order to support the member states and the regions in establishing a decentralised renewable energy supply and to establish market regulations in the sense of a stronger networking of the neighbouring regions. The proven core elements of the EU Renewable Energy Directive should be retained in order to leave the member states the necessary room



for manoeuvre for the respective national framework conditions, instead of restricting the national room for manoeuvre by simply giving preference to bureaucratic tenders.

The European Commission is making slow progress in this respect. The winter package „Clean Energy for All Europeans“, more than 1000 pages long, makes this clear. The goals formulated here, such as reducing greenhouse gas emissions within the EU by at least 40 percent compared with 1990 levels, initially seem laudable. Target formulations such as a 32 percent share of renewables in final energy consumption by 2030 and the governance mechanism in which the

member states contribute to the process through ‘national energy and climate plans and control’ takes place through ‘regional consultations’ highlight the current aspirations of the package - but unfortunately also their great lack of urgency, determination and speed in implementation. In addition, the EU wants to grant more rights to the user-producers of solar electricity, so-called prosumers. Financial barriers to trade in decentralised electricity from citizens are to be abolished. The weakness of the package, however, lies in the fact that it ignores the problems and contradictions of an ‘energy mix’, when the renewable, distributed and smart - and conventional, centralised and brute-force paradigms are essentially incompatible. Above all, it ignores the need to actively, predictably and rapidly exit the coal and nuclear energy generation fleets.

The idea of the Energy Union was born in 2015, which was to link all actors more closely.

...TO A NEW ENERGY MARKET FRAMEWORK

The technological and financial resources for a genuine European energy system transformation are already available. The production costs for electricity from wind and solar energy have long been competitive under real conditions and the necessary flexibility options are also available.

The role of the European Union is to set the framework that gives the individual Member States the necessary and timely requirements. At the same time, it remains true to the principle of subsidiarity and does not interfere more than necessary in the national sovereignty of the member states. When creating a Europe-wide legal framework for the expansion of renewable energies, it is essential to maintain a balance between respect for the individual national interests and efficient action in the interests of the citizens, for their well-being and that of the generations to come. The European Union faces the historic challenge of returning to the energy and peace policy relevance it had when the European Coal and Steel Community was founded almost 70 years ago. The Commission, Council and Parliament can strengthen the confidence of Europeans and help the European peace project to a new greatness. If the EU creates the framework for 100 percent renewable energies on the convergent energy markets for electricity, heat and mobility, it will make a decisive contribution to peace between the states and beyond Europe’s borders.

RENEWABLE _ DECENTRALIZED

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Electricity from the sun, wind, water, geothermal energy and biomass is already cheaper than all fossil and nuclear energy today, taking environmental pollution into account. The largely socialised external effects of fossil and nuclear energies and decades of subsidies in the hundreds of billions of euros not to be taken into account in cost comparisons has never been legitimate and it is less so today than ever. If we add up all the state financial aid, tax breaks and exemptions from environmental and health care costs from which conventional energy sources have profited in recent decades, the result for Germany in 2017 would be a „conventional energy levy“ of up to 10.8 €-cents per kilowatt hour.

The decisive factors for decentralised flexibility markets are the adaptation of the framework conditions for energy storage systems and the intensification of research and market introduction of conversion and storage technologies.

The decisive factors for decentralised flexibility markets are the adaptation of the framework conditions for energy storage systems and the intensification of research and market introduction of conversion and storage technologies. Adaptive regulation of CHP generation and the introduction of flexibility premiums are therefore important instruments. Electricity can be generated in all regions of Europe, regionally and locally, not only at low cost but also by creating added value. Regional surplus production should be distributed unhindered and could be included in the heat and mobility sector. To this end, it would be necessary for states to abandon the still common practice of more or less sealing off their electricity markets. A sufficiently developed, at least supra-regional and socially accepted conductor and electricity supply system throughout Europe is not immediately foreseeable.

The need for storage technology could be reduced by expanding the grid: this is cheaper, but it also affects the interests of citizens. In order to maintain social consensus on the expansion of renewable energies, alternatives to grid expansion in the form of storage facilities must be further promoted. In addition to a flexible market, storage technologies should play an increasingly important role in the integration of renewable energies in order to generate electricity in line with



demand. The widespread use of storage technologies must already be prepared by means of suitable support measures that will enable these technologies to reach market maturity.



SPATIALLY STRATEGIC _ CONVERGENT_ FLEXIBLE AND SMART

The city as a renewable power plant is moving into the foreground of municipal planning tasks.

A far-reaching transformation of energy supply towards decentralised, renewable energies cannot avoid being accompanied by an equally fundamental change in urban design. Distributed energy systems in rural areas play just as important a role as the development of energy regions, the re-municipalisation of urban energy suppliers and forms of locally organised energy supply such as citizen energy. The city as a renewable power plant is moving into the foreground of municipal planning tasks. All these forms of a future energy supply need the appropriate political support. When changing the urban design with a decentralised energy infrastructure, an agenda is needed that allows local politics to take up and implement well thought-out and innovative solutions. In this sense, the combined use of different renewable energy sources, together with to the geomorphological and microclimatic conditions and the technological innovations, as in the case of low enthalpy geothermal energy, enable us to consistently cover the energy needs for heating and cooling without emissions and environmental or visual impacts. An innovation that today allows us to implement the new distributed energy model without particular risks in the acceptance of plants by local communities.

A European framework regulation for the energy market is capable of providing reliable incentives for market-based investment in the future.

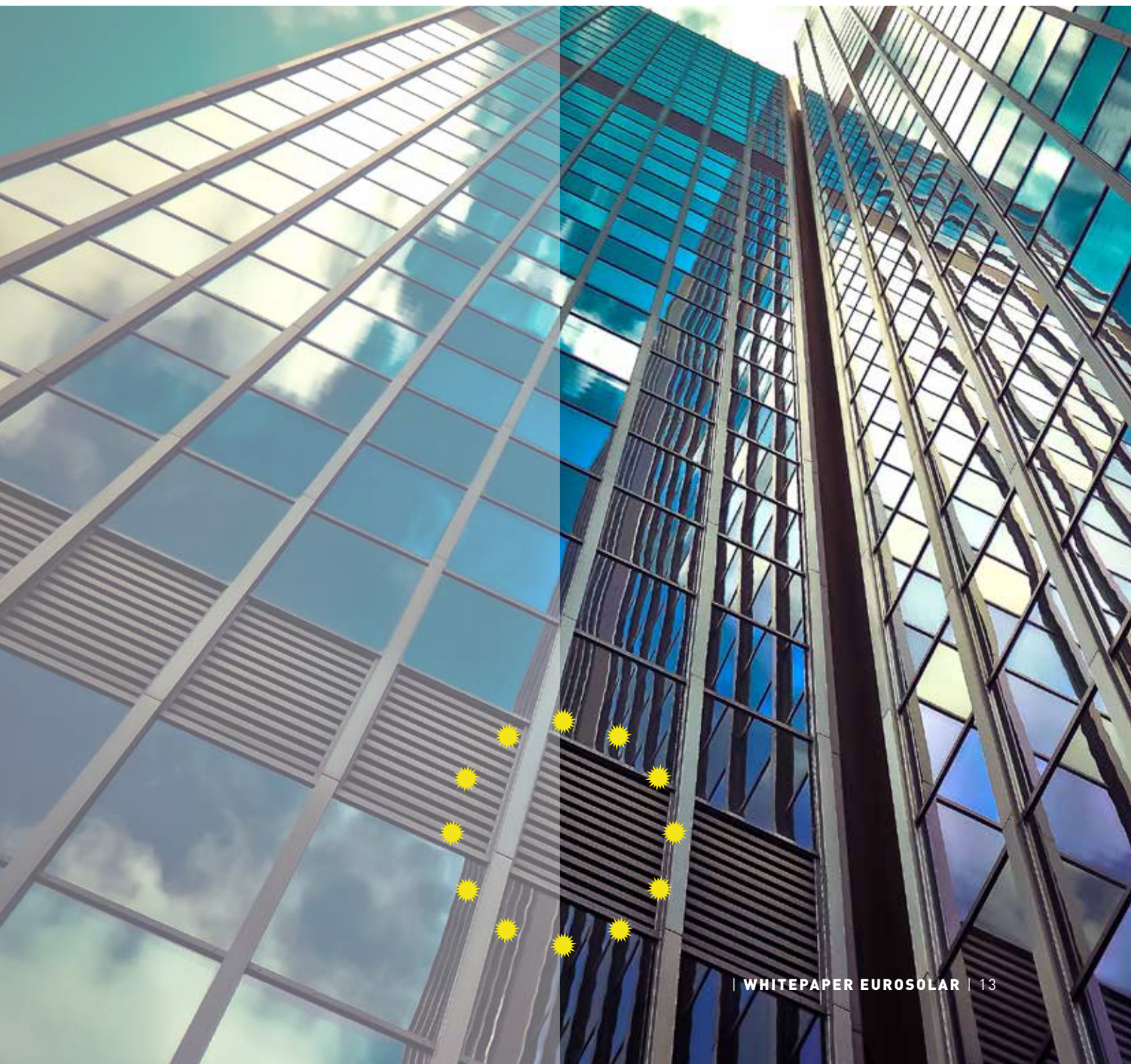
In order to make the energy markets more flexible in terms of the fluctuating supply of solar and wind energy and to make them as efficient as possible, the previously separately regulated markets for electricity, heat and mobility – the so-called sector coupling – need to converge. A European framework regulation for the energy market is capable of providing reliable incentives for market-based investment in the future. At the heart of this framework is a flexibility market as a necessary prerequisite for an energy system transformation in which supply security is guaranteed at all times despite volatile energy sources. These convergent energy markets include established instruments such as combined heat and power generation and high-profile mechanisms from the EEG as well as a flexibility premium. The prerequisite for success is the standardisation of taxes, levies and levies in the previously separately regulated sectors and, as a result, comprehensive and efficient regulation.

In addition to expanding the infrastructure at the distribution grid level, storage and CHP solutions are of course available to make the electricity grid more flexible.

It is now undisputed that even an energy supply that is 100 percent based on renewable energies can be secured at low cost despite fluctuating energy sources. This requires the support of flexibility options, which are already available to us today in a wide variety. These ways of harmonising electricity generation and consumption over time also need reliable and cleverly devised political framework conditions if they are to

become stable pillars of energy system transformation and business areas attractive to investment. In addition to expanding the infrastructure at the distribution grid level, storage and CHP solutions are of course available to make the electricity grid more flexible. But Power-to-X is also an area that deserves much more attention than is currently the case. The optimal performance of these measures requires smart management frameworks for such distributed energy resources. These are growing rapidly today but continue to be

hampered by the absence of a comprehensive market framework to facilitate effective distribution and optimize flexibility. The future belongs to a framework of efficient, smart local and regional grids and new regulatory frameworks that enable the open and flexible trading of, say, renewable electricity by for prices set by distributed renewable power market guaranteed to seek, find and reward the lowest costs and prices possible – for providers and users of generation, distribution, storage and mobility services alike.



ROLE OF THE BUILT ENVIRONMENT IN THE 100% RENEWABLE ENERGIES MODEL

In order to achieve the goal of a Europe with 100% renewable energy from distributed sources, the relationship between the built environment, from the territorial scale, to that of the city, of the neighbourhood / district and of the building, and the components of the decentralized energy infrastructure, must be carefully designed and guided.

In particular, the energy strategy of the European Union must contemplate the need for a new cultural approach to territorial and urban planning, in which the building, the city and the territory are a „holistic organism“ in a constant evolutionary process in terms of use, typology and form, through the integration of energy planning, in order to contain consumptions, emissions and the connected climate change, as well as the heat island effect.

The theme of energy efficiency is of central importance and has to be translated into the moderation and balance of energy consumption.

The theme of energy efficiency is of central importance and has to be translated into the moderation and balance of energy consumption. An objective that the production from renewable sources can contribute to achieving, by favouring the active role of consumers (prosumers) and a controlled supply of energy, due to the different availability of renewable sources over time, to storage capacity and distribution modalities.

By acting on the built heritage, which in Europe has a significant consistency, energy consumption can be significantly reduced through the energy retrofiting of existing buildings. This approach will as well as contribute to tackle the dramatic phenomenon of soil consumption, which, in some EU countries, has reached critical levels.

In parallel to this, the construction of new buildings reaching the Nearly Zero Energy Building (NZEB) standard or the Energy Plus level, which means that the building produces more energy than it consumes, a performance that today is more than practicable, can drastically reduce the need for energy for heating and cooling, also thanks to the bioclimatic approach and the use of passive devices.

The reduction of energy waste can thus concretely contribute to the reduction of emissions, favouring the energy transition thanks to the downsizing of the needs.

At the same time, technological innovation related to production plants, storage systems, energy distribution networks and systems for monitoring, reducing and balancing energy consumption, plays a decisive role in the energy transition. Technological evolutions allow, in fact, to favour the integration of energy production even in urban contexts, as in the case of district heating and cooling systems. Furthermore, the use of renewable sources including, in addition to solar and wind energy, biomass, hydro-electric, and even geothermal energy, enables energy production in historic centres, without changing their architectural identity, thus safeguarding the identity characteristics of European cities. In recent years, European and national



policies encouraging the use of RES in the recovery of buildings have achieved significant results and should be re-proposed and renewed to ensure their effectiveness.

It is also essential to take into account that the new energy model is reflected in the urban structure also through the solutions for sustainable mobility: electric mobility systems, shared and efficient for urban transport, integrated with the smart city approach, contri-

bute to reduce emissions and enhance energy production from renewable sources.

Finally, at Community level, policies and exploratory as well as training tools are needed to facilitate the decline of this approach in an appropriate manner with respect to the specific characteristics of the local contexts, and of the „energy regions“ of which Europe is composed, with reference to territorial distribution of the different types of renewable sources.



EURENEW INSTEAD OF EURATOM _ ENERGY SECURITY POLICY

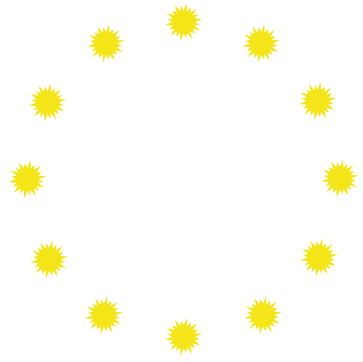
Therefore, it must now be a question of replacing the privileged status of nuclear energy with a consistent privileged status of renewable energies ...

A new European Energy Market Framework Regulation will render the EURATOM Treaty obsolete. It must be replaced by a EURENEW Treaty, which also regulates the monitoring of the restructuring process. In addition, the institutional privileged status of nuclear energy in Europe expressed in the existence of EURATOM should finally be overcome. Therefore, it must now be a question of replacing the privileged status of nuclear energy with a consistent privileged status of renewable energies and thus replacing the EURATOM Treaty with a EURENEW Treaty (European Renewable Energies). Just as the end of the operation of the remaining nuclear power plants and the withdrawal from the EURATOM Treaty must be accompanied by the withdrawal from research on fusion reactors and new nuclear reactor designs.

The energy system transformation to 100 percent renewable energies must become a key component of the EU's energy security policy.

The energy system transformation to 100 percent renewable energies must become a key component of the EU's energy security policy. This includes not only the independence from energy imports from insecure countries, but also the diversification of the EU's own energy supply. This includes strengthening distribution networks in the sense of networked autonomy. This will make Europe's infrastructure less vulnerable to terrorist attacks, acts of war from so-called cyberspace, heat stress, water shortages and other global warming consequences. Energy security policy also includes a corresponding foreign energy policy, which is necessary for the opportunities of a renewable economy and supports other states and regions of the world in the necessary change.



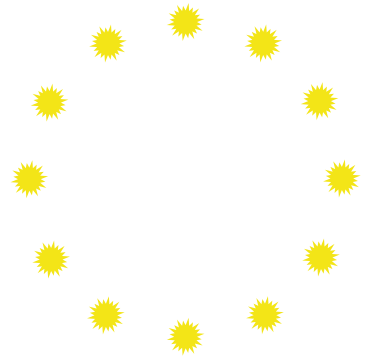


RENEWABLE INDUSTRY – JOBS AND EXPORTS

The fully renewable energy supply is an industrial high-tech project. A genuine Energy Transition thus offers the opportunity for a reindustrialisation of the EU and thus the opportunity for the preservation and creation of new industrial jobs. In the sense of a solar world economy, it is only the first step and the basis for a modern industry oriented towards closed material cycles and makes large parts of international world trade superfluous through relocation. It would also be advisable to pay attention to movements such as „Transition Town“. This type of initiative, which is now represented in large numbers all over the world, focuses on the creation and strengthening of local participatory economic forms. Their central goal is to achieve the highest possible local resilience in order to be less dependent on global economic flows, imports and centrally controlled energy. In this process, diversity and modular structures reduce the susceptibility of a system to failure and increase its flexibility. In terms of energy supply, this means that the more energy sources used in a given location, for example, the easier it is to compensate for the disruption of a single source.



The fully renewable energy supply is an industrial high-tech project.



OPEN RENEWABLE ENERGY MARKETS FOR ALL

CALLS FOR TENDERS SLOW DOWN ENERGY SYSTEM TRANSFORMATION AND HARM COMPETITION AND COMMUNITY

For the future of Europe, we are drafting an energy policy that can create meaningful incentive systems freely and independently of corporate interests. To this end, it is crucial to create a fair competitive framework for market participants – especially for those whose interests are otherwise often not heard, such as citizens' energy cooperatives or consumers (prosumers). In any case, attention must be paid to the targeted expansion of prosumer rights, since the transition to autonomous energy production is the core of a genuine, decentralised energy turnaround. For this reason, the electricity market for the energy system transformation must make trading in renewable electricity products as low-threshold as possible – through a renewable electricity market and direct tenant marketing.

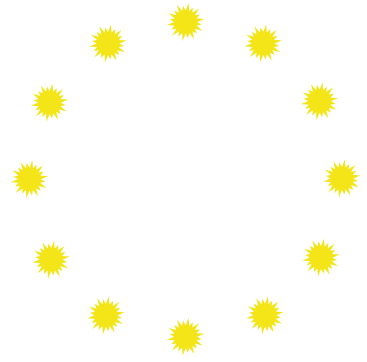
Fair participation opportunities must be created for municipalities, SMEs, municipal utilities and citizens' cooperatives.

The market must be able to exploit the economic advantages of local and regional marketing of electricity instead of artificially increasing its price through conditions, taxes or levies.

Fair participation opportunities must be created for municipalities, SMEs, municipal utilities and citizens'

cooperatives. Feed-in tariffs remain an important instrument. However, if Member States decide to use tendering instead of feed-in tariffs, de minimis rules must avoid crowding-out of small actors. If it becomes unavoidable that commercial projects are put out to tender and auctioned, alternatives will have to be implemented in the form of public service projects or in public hands, such as by municipalities. Non-profit projects will enable citizens to carry out the energy system transformation in the interest of the local community, with revenues spent on non-private activities in accordance with the organization's statutes. Non-profit projects will serve to improve the local infrastructure. Future tariffs may consist of two components: a) real costs (interest, depreciation, operating costs) plus b) a benefit payment to the affected community.

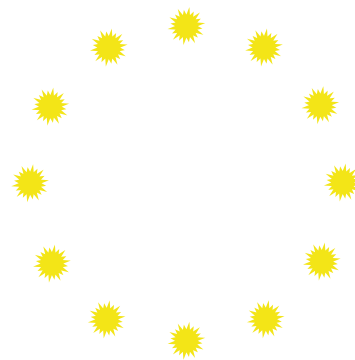
So-called technology-blind tenders to determine the financial promotion of renewable energies put solar and wind energy in competition with each other – both technologies are necessary for the success of a cost-efficient transformation of the energy system in a balanced ratio. A glance at the results of the first tenders and at the results of the tenders before and after the changes in Germany clearly shows that the number of participating players has shrunk considerably. As a result, the energy supply is gradually being centralised again, as only the large companies are able to survive in these conditions. That is precisely what must be prevented. For our vision of a holistic and sustainable energy system transformation it is of central importance that it is supported by the local people and is participative in every sense. The system of tendering thwarts this idea in favour of larger companies and must be ended quickly and excluded at European level.



END SUBSIDIES FOR FOSSIL AND NUCLEAR ENERGY TECHNOLOGIES AND ENERGY SOURCES

Nuclear and fossil energy technologies have been subsidised in Germany alone since the 1970s with a total of around 400 billion euros. This has distorted the energy market to this day. Without these subsidies for the nuclear and coal-fired power plants that have since been written off, renewable energies would already be cheaper than these nuclear and coal-fired power plants – in other words, they are already actually cheaper, but this is distorted by the subsidy policy. The adherence to coal-fired power generation is an ecological disaster and hampers the dynamics of economic change towards genuine social compatibility due to the inflexible overcapacities. Existing overcapacities are creating unprecedented low electricity prices in European electricity wholesale, thereby distorting market signals.

The EU's credibility is at stake in the face of unchecked coal-fired power generation and the associated pollutant emissions. The EU's climate targets can only be maintained by passing a coal phase-out law, as has already been called for by various parties. To seek a consensus with the profiteers of coal-fired power generation leads to delays, higher costs and questionable compromises, which is why a legal regulation with accompanying regulatory measures is necessary.



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ABOUT EUROSOLAR

THE FULL RENEWABLE ENERGY SUPPLY: A MOMENTOUS AND VISIONARY GOAL – THE CHALLENGE OF THE CENTURY TO HUMANITY.

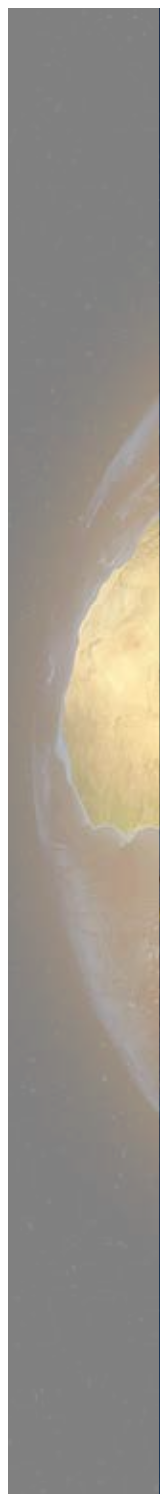
EUROSOLAR was founded in 1988 as the European Association for Renewable Energy by Dr. Hermann Scheer (1944 – 2010) and is a registered non-profit organization with a head office in Germany and thirteen sections in various European countries.

Being dedicated to the cause of completely substituting for nuclear and fossil energy through renewable energy, EUROSOLAR conducts its work independently of political parties, institutions, commercial enterprises and interest groups

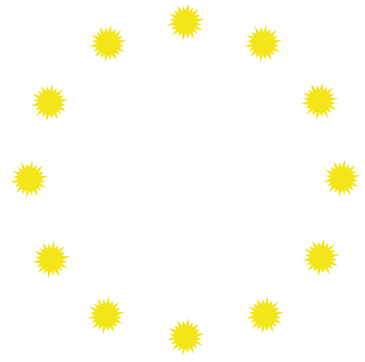
EUROSOLAR brings together expertise from the fields of politics, economy, science and culture to promote the entry of solar energy and to develop and encourage political and economic action plans and concepts for the introduction of renewable energy.

For its members, EUROSOLAR provides the opportunity to play a part in the sociocultural movement for renewable energy by joining the association.

www.eurosolar.org



*The full renewable energy supply:
A momentous and visionary goal -
the challenge of the century to
humanity.*



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