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Policy Paper on Climate Action

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REGENERATION LTD



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MILLENFOLKELIST
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EUROPEAN YOUTH
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Executive Summary

In the 2030 Agenda for Sustainable Development, Member States reaffirm their commitment to halting environmental deterioration and combating climate change as soon as possible. At least half of respondents to the European Youth Eurobarometer survey, which was released in January 2018, regarded education and skills development, environmental protection, and combating climate change as priority issues. Despite their interest in politics, President Juncker said that young people in Europe participate in traditional forms of engagement less frequently. The apparent paradox is that while Member States must develop policies to tackle climate change that will have an impact on youths' lives in a few years, the latter do not appear to be particularly interested in voting or participating in decision-making.

Through the United Nations Joint Framework Initiative on Children, Youth, and Climate Change (Joint Framework Initiative), the United Nations System acknowledges the crucial role that youth play in combating climate change and collaborates closely with youth-led and youth-focused organisations all over the world. Since 2008, the Joint Framework Initiative has coordinated the efforts of sixteen intergovernmental organisations and numerous youth organisations to enable young people to take adaptation and mitigation measures and improve their effective participation in the formulation of climate change policies.

This document contains the policy proposals made by young people who convened in the UK, as part of the YOURTRIP initiative to debate the issue of "Low carbon energy solutions and local actions".

Introduction

A transition to a low carbon energy system is needed to respond to global challenge of climate change mitigation. It is essential to make the switch to a low carbon energy system due to the combined difficulties of lowering emissions from fossil fuels and providing access to clean and inexpensive energy. The burning of fossil fuels is one of the biggest contributors to climate change and we believe that it is critical to move to a more sustainable and





renewable energy source to in order to reduce the impact on the planet and global warming. Energy costs have become a concern for the poorest in our communities, with some choosing to “eat or heat” – putting the energy company into community ownership empowers communities with the power to charge the residents of the neighbourhood a reasonable rate for their energy – rather than focusing on profit.

To ensure that policies, plans, and programs offer fair and equitable access to resources and technologies, the transition must take energy justice issues into account. In order to take into consideration distributional, procedural, and recognised inequities as well as newly developing concerns like conceptions of justice in energy system decision-making. The breadth of research provides important viewpoints on the energy transition as well as instruments for policy-making and decision-making processes. This policy proposal aims to advance and promote this across the EU.

Analysis

Low carbon simply means less carbon dioxide (CO₂). Carbon dioxide is a key greenhouse gas that drives global climate change. It is released through lots of different types of activities, such as; deforestation, burning fossil fuels and volcanic eruptions. Therefore, by lowering the amount of CO₂ we produce, we are being kinder to our planet.

The Framework Convention on Climate Change calls for limiting atmospheric Green House Gases (GHG) concentrations to a ‘level that would prevent dangerous anthropogenic interference with the climate system’. There are conflicting definitions of what level of greenhouse-gas emissions may be considered dangerous, and we make no attempt to resolve that debate here. A consensus is developing among many scientists, however, that even a doubling of atmospheric CO₂ concentrations from the pre-industrial levels of about 280 parts per million by volume will have far-reaching impacts (Wigley, 1997). A doubling of atmospheric CO₂ concentration is expected to result in a mean global temperature increase of 1.5–4.5°C and could result in a sea-level rise of up to 1 m by 2100, increased severity of storms, and shifts in agricultural belts (IPCC, 1996).



Specifically, in 2019, the EU emitted around 3.1 gigatonnes (Gt) of CO₂, less than 9% of the worldwide CO₂ emissions for that year, however there is still progress to be done (EUROSTAT, 2022).

Since climate change depends more on cumulative emissions over the next century than it does on the timing of those emissions, immediate, draconian action does not appear to be required to stabilize atmospheric CO₂ concentrations. Modest reductions today, however, will need to be followed by more significant reductions in the future. Thus, the requisite steps need to be taken to promote energy-technology research and development, and acquire needed experience with new technologies through market penetration, pilot projects, and large-scale commercialization. The record is, however, not encouraging in this regard; recent investments in energy R&D have been decreasing rather than increasing in many of the industrialized nations (Kinzig & Kammen, 1998). One answer to lower commissions of CO₂ is renewable energy. The most popular renewable energy sources currently are:

- Solar energy
- Wind energy
- Hydro energy
- Tidal energy
- Geothermal energy
- Biomass energy

Good practices

There are some successful cases of low-carbon community practice in the world.

In Europe, the residential area of Hammarby, south of Stockholm in Sweden, with a total floor area of about 1million square meters, is the largest comprehensive low-carbon community to be built in Sweden. This community adopts a range of practices including energy recycling, automatic waste classification and water recycling, together with a public transport system that promotes cycling and walking. The solar and wind community completed in



Beder, Denmark in 1980, is a public residential community that was organized by citizens, using solar and wind as the main energy source. Another example is Beddington zero energy development (BZED) in the southern suburbs of London, England. Here, on an area of 1.65 hectares, many measures of energy conservation and pollution reduction are concentrated into a small ecological community. CO2 emissions have been successfully reduced.

In Middle East, the Masdar City, a desert 11 km southeast of Abu Dhabi, has become a place of recent discussions. It covers an area of 6.4 square kilometers, just like the ecological city plan in Dongtan of Chongming Island, Shanghai, China (which sets a target of a “Zero Carbon” city). Masdar, however, has gone one step further, listing “Zero Wastes” and “Zero Vehicles (private cars)” as the primary aim of development. 30% of the land of “Masdar City” will be used as lodging areas, 20% for a “special zone” of economy, 24% for transportation and infrastructure and 10% for an experimental and exhibition area of new energy. There are not any vehicles in the city and with measures to create a comfortable natural microclimate, the carbon emission is zero. It is intended to create this city with a capacity of 50,000 people before 2016. The city will be the first green city in the world, with no petroleum and with zero carbon emissions.

In North America, the Geos neighbourhood in Arvada, Colorado, has been designed by Michael Tavel Architects and David Kahn Studio and will be the largest net-zero energy, urban mixed-use neighbourhood in the United States. The site is about 25.2 acres, the private parcels are 12.1 acres and have 282 residential units planned on it. The construction of phase 1 began in 2009 and will be finished at the end of 2011. Geothermal energy and sun power will sustain all of the community’s energy needs and will replace fossil fuels. The neighbourhood is intertwined with natural systems, stormwater fed landscapes, and civic places. Rain and snow melt will feed street tree rain gardens, percolation parks, plazas, and community gardens. The project has already been awarded the 2006 AIA Denver Honor Award, the 2006 Denver Sustainability Award, the 2006 AIA Colorado Citation Award and the 2009 ASLA Analysis & Planning Award.

In Asia, the low-carbon community in Changxindian, west of Yongding River in Fengtai District, Beijing, China is another good example of a low carbon





community. The site covers an area of 500 hectares and plans to accommodate 70,000 people. The project adopts a sustainable development strategy that aims to balance living and work. Meanwhile, by making use of public transport and energy recycling, it aims to be successful in energy demand management, renewable energy source use, low energy consumption, recycling of water resources, accessible public transport, efficient waste management systems and minimizing carbon discharge in the residential areas.

(Qiao Ling Luo & Q. Zhan, 2012)

Conclusion

Low-carbon energy is energy that is generated using lower amounts of carbon emissions such as, wind, solar, hydro or nuclear power. These alternative methods of producing energy are better for the planet as they release less carbon into the atmosphere. Renewable energy technologies provide needed energy services with little or no carbon emissions. The main drawback of many solar, wind, and biomass systems has always been high-cost relative to fossil-fuel alternatives (Kinzig & Kammen, 1998). However, the cost of delaying action on climate change mitigation is potentially overwhelming in terms of the economic, technological, and inevitably social resources that would need to be mobilized in order to facilitate the more rapid transition to a low-carbon economy necessitated by such a delay.

To quickly transition to a "greener" way of life, there are numerous tactics and aims, but there are also numerous measures that must be taken. Unified tactics and standard procedures ought to exist across the board in all EU member states. In addition to the strategy and the law, there ought to be an incentive for it to be put into practice in daily life, communities, houses and in business.

Recommendations





Abolishment of fossil fuel

We propose that it be made law that the use of fossil fuels in new buildings (residential and business) be abolished from 2025 across all EU Countries – with tax incentives to use low carbon renewable energy as standard.

Financial incentives for the transition to renewable energy resources

We propose tax-reduction for energy construction companies and developers in the EU that makes a transition from fossil fuels to green and renewable sources.

Encourage local energy communities

We propose to give financial and social incentives to local communities to form energy communities, where the residents actually ‘produce’ or better harness energy from renewable energy resources, and then actually use/consume it. Using a community-based energy company and localised network approach will put the control of financial charges to users and will result in low-cost energy for tenants and business owners. Furthermore, we propose the creation of an enabling body to oversee the implementation of a network of community energy companies – providing practical support to people.

Exploitation of Geothermal Energy

We propose the more extensive use of Geothermal energy in new homes and businesses as law. Specifically, the move towards Carbon reduction as part of the global effort in the fight against climate change is moving at a pace. One of the major problems faced by the EU is its continued reliance on fossil fuels such as gas in domestic properties.



Cross-Sectoral Collaboration & Exchange of good practices

We propose to prioritise the collaboration between the public sector, the private sector and the civil society, in order to:

- research, develop, implement and promote low carbon energy solutions and other environmentally friendly practices that could be implemented at local, regional, national and European level;
- support the public, and especially people from social vulnerable groups to adapt to climate change;
- implement common awareness campaigns so as to inform people at what can be done for climate change adaptation and/or mitigation on personal level, local, regional, national and European level.

We also recommend the development of networks with other, non EU countries, as to exchange good practices on renewable energy resources, and other environmentally friendly practices.

References

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