



YES - Europe Young leaders in Energy and Sustainability

ADOPTING GLOBAL ENERGY TARGETS & EMPOWERING YOUTH TO PUT THE ENERGY TRANSITION BACK ON TRACK

SEPTEMBER 2023 **POSITION PAPER FOR COP28 BY YES-EUROPE & EYEN**

Abstract

Under the Paris Agreement, the international community committed to limiting global warming to 1.5 degrees. However, the current plans to combat climate change are inadequate, pushing us closer to an irreversible tipping point. The last IPCC report shows that we have the knowledge tools and resources to curb global warming, but multiple pathways could be embraced. Therefore, this year's climate conference should not discuss if we can achieve this goal but rather how we can achieve it.

The energy transition and slashing greenhouse gas (GHG) emissions has been established as a main priority for this year's Conference of the Parties (COP). We believe that it is paramount to adopt well-defined targets for renewable energy and energy efficiency to remove the gaps between the current deployment of renewable energy and the levels needed to achieve the Paris Agreement.

The energy transition offers the potential for substantial worldwide job creation, with projections estimating 40 million jobs by 2050. In line with the call to put people, lives and livelihoods at the heart of climate action under the COP 28 letter to the Parties, we strongly advocate for the adoption of a comprehensive job guidance and present a tool that aims to tackle the global renewables skills gap while boosting the capacity of our youth workforce in the energy transition.

1. About the YES-Europe/EYEN initiative

Over the past months, a dedicated group of volunteers from YES-Europe and EYEN have come together to discuss how the 28th Conference of the parties to the UNFCCC taking place in Dubai from November 30 to December 12 could reflect the need to adopt global energy targets to achieve the Paris Agreement goal of limiting global warming to 1.5°C.

The outcome of this discussion is 'Adopting global energy targets & Empowering youth to put the energy transition back on track'. This position paper provides an overview of the need to adopt global targets for renewable energy sources and energy efficiency, address the skill gaps within the energy transition workforce, as well as the reasons behind our call. This text has been prepared through the analysis of the documents and negotiations resulting from the June 2023 <u>Bonn Climate Change Conference</u> as well as the <u>COP28 Letter to the Parties</u> released in July 2023 and the <u>COP 28 Thematic Programme</u>.

2. Introduction

The science is clear: limiting global warming to 1.5° C requires cutting carbon dioxide (CO₂) emissions by 37 gigatonnes (Gt) from 2022 levels and achieving net-zero emissions in the energy sector by 2050.¹ Despite some progress, current climate pledges and plans fall well short of the Paris Agreement (PA) objective. The full implementation of current national commitments could reduce CO₂ emissions by 6% by 2030 and 56% by 2050 compared to 2022. This would lead to an emissions gap of 34 Gt by 2050, underscoring the reductions required to limiting global warming to 1.5° C.²

¹ IRENA 'World Energy Transitions Outlook 2023: 1.5 C° Pathway, Volume 1, International Renewable Energy Agency, Abu Dhabi p.19

This illustrates that **the energy transition is off-track**. Significant gaps remain between the current deployment of renewable energy and the levels needed to achieve the PA goals. As a way of example, 300 GW of renewable energy sources (RES) were added globally in 2022. However, an annual deployment of 1000 GW of renewable power is needed to stay on a 1.5°C pathway.³

As such, both the volume and share of renewable energy production needs to grow substantially. However, policies and investments are not consistently moving in the right direction. Last year, there were record renewable power capacity additions. However, **2022 marked a troubling milestone: it recorded the highest levels of fossil fuel subsidies ever**, as many governments sought to cushion the spike in energy prices. Consequently, global investments across all energy transition technologies reached a record high of USD 1.3 trillion. Worryingly, fossil fuel capital investments were almost twice those of renewable energy investments.

3. What do we call for?

Overcoming these challenges requires a common global roadmap and COP28 offers a crucial opportunity to align and take concrete action to put the world's energy transition back on track. In view of that and taking into consideration the COP28 agenda, we call for the adoption of a worldwide target for renewable energy and energy efficiency that removes the gaps between the current deployment of renewable energy and the levels needed to achieve the PA. Such a target is essential to harness investment in RES infrastructures, unlock the development of RES centered policy and regulatory frameworks. Furthermore, recognizing that a successful energy transition hinges on a skilled and empowered workforce, we call upon the adoption of a comprehensive job

³ Annual Renewable Power Must Triple until 2030. (2023, June 22).

https://www.irena.org/News/pressreleases/2023/Jun/Annual-Renewable-Power-Must-Triple-by-2030

guidance and educational program to tackle the global renewables skills gap while boosting the capacity of our youth workforce.

4. The basis for our claim

Under the 2015 Paris Agreement to the UNFCCC, the international community committed to "[hold] the increase in the global average temperature to well below 2 °C and pursu[e] efforts to limit the temperature increase to 1.5 °C above pre-industrial levels".⁴ Although nations all over the world are committed to reduce GHG emissions, there has not yet been an agreement on how to achieve this goal. The last IPCC report shows that we have the tools and the financial resources to do it, but multiple pathways could be embraced (some more sustainable than others). As such, we believe that this year's climate conference should not discuss if we can achieve this goal but rather how we can achieve it. Moreover, in the COP28 letter to the parties released in July 2023, the fast tracking of the energy transition and slashing emissions before 2030 has been established as a main priority together with putting a human face on policy choices.⁵ In response to that, we urge the adoption of a worldwide target for renewable energy and energy efficiency that will enable the delivery of holistic outcomes for the environment and human health.

Furthermore, the energy transition offers the potential for substantial worldwide job creation, with projections estimating 40 million jobs by 2050.⁶ In line with the call to put

⁴ Paris Agreement, 12 December 2015, art. 2. 1 (a). The Paris Agreement was adopted at the twenty-first session of the Conference of the Parties to the United Nations Framework Convention on Climate Change.

⁵ COP President-Designate, 'COP 28 letter to parties' in <u>https://www.cop28.com/en/letter-to-parties</u>

⁶ IRENA, Press Release on energy transformation, January 2020 in

https://www.irena.org/News/pressreleases/2020/Jan/Energy-Transformation-Can-Create-More-than-40m -Jobs-in-Renewable-Energy

people, lives and livelihoods at the heart of climate action under the COP 28 letter to the parties, we strongly advocate for the adoption of a comprehensive job guidance and educational program, considering that a highly skilled workforce is therefore indispensable for effectively achieving the energy transition.

5. Why do we call for the adoption of a global target on Renewable Energy Sources?

RES are a sustainable alternative to highly polluting fossil fuels that provide clean energy. Moreover, RES allows for a diversification of the energy supply. With RES, energy is locally generated, which creates wealth, economic development and jobs in manufacturing, installation and operation. As such, RES play a crucial role in sustainable development by reducing GHG emissions, improving energy security and providing access to energy to communities that previously lacked it.

6. Why do we call for the adoption of a global target on energy efficiency?

Energy efficiency reduces energy use and energy that is not produced does not need to be decarbonized. As such, it contributes to the reduction of GHG emissions but it has also a clear link with lower energy prices. Increasing energy efficiency reduces the need to add expensive new power generation or transmission capacity in existing networks and it is vital to improve energy access globally at affordable costs. Moreover, energy efficiency is a form of successful energy management, which is among the most important aspects of scaling renewable electricity penetration in the grid, taking into account that congestion within the grid is a frequently occurring phenomenon in countries and regions with high RES uptake.

7. Why targets?

The presence of a well-defined target is a way to move to concrete actions beyond words and it has demonstrated its efficacy in effectively promoting a greater utilization of RES and increasing the energy efficiency levels within a particular region compared to other regions. This is a consequence of the following reasons:

- First, the formulation of a target requires the assessment and study of the current situation that can be used as an information base to track the energy transition.
- Second, the establishment of a target is perceived as political commitment and provides a long term direction for policy and investment decisions.
- Third, it allows tracking of progress towards climate neutrality as they can be used as a benchmark against which the effectiveness of various policies can be measured.

An example of their successful implementation can be found in Europe. To illustrate, under the fit for 55 package, the European Union has set a target of minimum share of 40% from RES in final energy consumption and an improvement in energy efficiency of at least 32.5% by the year 2030. This is fostering the deployment of RES and sets clear political and economic guidelines that have unlocked the investment in RES across Europe.

In the same line, a global target would provide a long-term direction for policy and investment decisions across the different sectors comprising the needs and views of every nation. This is essential for the international community to deliver old promises and set a new deal on finance to achieve the PA. Moreover, the establishment of a global target would give the visibility and stability that is needed to support RES. In other words, RES markets would exponentially grow if the 198 countries that have ratified the UNFCCC, would agree on the need to invest in the expansion of RES to achieve the PA. Moreover, the adoption of a global target among all the nations would allow for the

optimal participation of the global south in the decision making process which is essential to ensure that the energy needs of these rapidly growing populations are met sustainably.

8. How do we envisage the implementation of these global energy targets?

Although there are multiple ways to implement and monitor the adoption of these global energy targets, we provide two recommendations that should guide the global targets adoption process and be considered in any case:

- First, in line with the environmental law principles agreed under the UNFCCC convention. Considering in particular the obligations of the global north towards the global south and the states' common but differentiated responsibilities according to their capabilities and historical responsibilities.
- Second, recognizing that a strong workforce will be essential in the global transition from fossil fuels to RES. As such, a global educational and job guidance programme is essential to ensure the right competencies and skills among the workforce for upscaling RES and harnessing energy efficiency. A skilled workforce is vital for a successful energy transition, yet notable skill gaps exist in this workforce. To address these challenges we advocate for the adoption of a global program to guide, reskill and upskill present and future workforce.

9. What is in it for young people?

Young people face the greatest risks from the consequences of inaction on the climate crisis, making them highly motivated to drive the necessary transition. To skill and

empower youth to deliver the global energy targets, governments, educational institutions, and other stakeholders such as NGOs, can take several actions.

In this context, we present the **Energy Transition Careers Compass**, a tool that outlines the different stages of the energy transition job ecosystem, including research and development, installation, operation and maintenance. This tool empowers young people to navigate their career paths, providing the clarity they need to make informed education and career decisions that will lead them to have impactful roles in the renewable energy sector. This comprehensive resource categorizes over 100 jobs from a youth, global south, and global north perspective, classified by streams (upstream, midstream, downstream) and disciplines (Research and Development, Policy, Business Development, Preliminary Engineering, Engineering and Development, and Operations), along with levels of experience (Junior, Mid-level, Professional). Moreover, it also highlights the critical roles of civil society, NGOs, and advocacy in the industry.

10. Call for action

Our vision includes the formulation of a brand new energy ecosystem, where every stakeholder matters and is invited. We need the private sector for all the components of our decentralized and digitized grids, we need motivated citizens to work on it, policymakers to lay an enabling framework and, most importantly, civil society to become the glue that connects the communities with the decision-makers. No one should be left behind.

Your support is of paramount importance in our collective endeavor to tackle the climate crisis. By endorsing our call to action, you support the promotion of two pivotal elements in the realization of the energy transition. Your support will empower us to expand the boundaries of inclusiveness within the energy transition, addressing both the infrastructure and skills gap necessary for a sustainable future.