

DECARBONISE. NOW!

With this appeal, the undersigned PVP4Grid project partners stipulate to drastically reconsider the EU and its Member States' policy priorities, and commit to sustainable development and more ambitious energy and climate targets, by means of addressing the widely untapped potential of all Europeans yet to become PV prosumers, for the sake of rapid and effective decarbonisation.

Yes, it's URGENT

Less and less people dare to challenge the warnings [scientists in large numbers](#) are issuing about the unprecedented rate of global warming in the history of humankind, and the '[untold suffering](#)' that will follow. Nevertheless, powerful industries and their interest groups that benefit from exploiting raw materials and natural resources, alongside governments and parties among even the political mainstream, continue to ignore the fact that the window for limiting our planet's temperature rise is rapidly closing. Some even pretend that climate change is anything but human-made.

Such denial of reality and the resulting climate inaction appear severely hazardous, with extreme weather events such as all-time record highs, reoccurring natural disasters and a monstrous biodiversity loss gaining [top positions in global risk rankings](#). While the reasons for ignoring the obvious may be hard to retrace, the resistance to take consequent action is less so.

Wave Good-Bye to our Way of Life?

Mitigating climate emergency would require a profound transformation of the way we move and transport, farm and eat, heat and cool, live and construct, make and use energy – for each and every one of us. Numbers show the close link between the wealthier nations' lifestyles and excessive consumption, emitting in 2018 an all-time high of [55 gigatonnes of CO₂](#) – something the world just cannot afford to keep discharging at such a scale even if droughts, floods and bushfires were to be contained, and entire eco-systems rescued from collapsing. Calculations warn that [emissions must fall by half by 2030](#) to stand a fighting chance of limiting global warming to 1.5 °C.

Reaching the objectives of the Paris Agreement would require Europeans born after 2012 not to overspend on their [remaining carbon budget of 105 tonnes of CO₂ per capita](#). At the current rate of [6,9 tonnes per year](#), every European of 8 years or younger has no more than 15.2 years left before they must cease causing emissions. On a global scale, this number goes down to 9 years (if warming is limited to 1.5°C) – whereas emission forecasts point to opposite directions, expected [to increase until at least 2040](#).

It is secondary in this context, which of the dire predictions made by reputable climate researchers will eventually prove true: the situation is going from bad to worse, and we are running out of time – unless we succeed with the most rapid and inclusive transition across energy, land, industrial,



urban and other systems ever witnessed. Kernels of hope and pretext for inaction are spread by those who believe that innovation and technology can deliver solutions to turn the situation around, and keep the planet inhabitable. But whoever will be proven correct – there is indeed data revealing a stupendous (and yet untapped) potential for change.

Energy matters

The fact that since 1980, global consumption of [solar and wind energy has increased by 373% per decade](#) would stand out as excellent news, if only it wasn't – in 2018 – still 28 times (!) less than fossil fuel consumption (gas, coal and oil). In the EU, [the energy sector including transport, industry, and heating, is responsible for close to 80% of total GHG emissions](#), of which fossil fuels combustion represents 75%. [Recent studies](#) suggest similar progress is being made at global level, outlining that 90% (or more) of the required emission reductions could be achieved by consequently deploying renewable energy technologies.

Becoming aware of such trends and potential is promising as they demonstrate by how much emissions *could* be reduced – and yet stupefying, considering *why not more* is being achieved; as even without game-changing innovation, fossil fuels could simply be replaced by renewable energy options - all of which are available in mainstream markets.

And there are more positive trends: since 2004, the share in renewables has grown by 6% annually, reducing the energy sector's emissions by more than a quarter. In 2019 only, [Europe's power plants emitted 12% less GHG](#) – the sharpest drop since 1990, due to a 24% decrease in generation burning hard coal and lignite.

Fortunately, the energy system transformation is progressing, with the political, social, economic and technical feasibility of renewable energies having drastically improved over the past few years. Today, wind and solar are the most cost efficient options in most electricity markets, and would be even more so, if sources of greenhouse gases were subject to proper carbon-pricing or an ETS that deserves its name.

And yet, neither pace nor level of efforts is sufficient to get anywhere close to meeting the Paris targets.

Shifting towards ONE Priority in Policy-Making

It is crystal clear that we need to take action on an unprecedented scale and reconsider traditional views of what is politically possible. Regarding energy (and the case of PV prosumers), this would translate into shifting all decision-making following ONE priority: each and every compromise, each and every conflict of interest, each and every new set of laws must first and foremost address the *criterion of sustainability!*

In consequence, the sacred triangle of the highest principles in energy policy – sustainability, security of supply and affordability – would need to come in a new shape, putting the former above

the two latter. For instance, on condition that the planet's emergency is seriously acknowledged, reducing emissions would outweigh economic growth and job saving in industries that are not contributing to sustainable developments. Here, the Commission's new [European Green Deal](#) offers a tremendous opportunity to apply further, and more serious, commitment to "Net Zero 2050", which in turn means to Decarbonise NOW!, by increasing as part of a larger set of ambitious measures the EU's renewable energy target from the current – and insufficient – 32% to at least 40–45% by 2030, and up to 100% by 2050 at the latest.

Put PVs on every available Roof & have People taking part!

Facilitating the expansion of renewable energy sources comes in many forms, such as: secure investments, phase out and redirect support for nuclear, "clean" coal and "natural" gas and its infrastructure, provide funding for greening notably the heating and transport sectors, and incentivise smart and decentralised infrastructure development that can integrate higher shares of variable renewables (until the 100% is reached). Yet, successfully combining all those elements would still fall short of greater ambition and higher targets, if we don't manage to get the transition's most important actor on board – the energy consumer, or: Europe's people and their industry.

Financial benefits aside, one of the most suitable ways for making people aware of climate action and its link to what energy actually is and where it comes from, is to engage as prosumers, and acquire solar panels, and then consume, store or sell the energy generated, whether at residential, community or industrial scale. And although it is not a new concept and PV prosumers are to some extent spread across Europe, almost all of the EU's buildings have something in common: **unused rooftop space**. [Less than 10% of the available roof space is currently equipped with solar panels, reaching a total installed capacity of around 80 GW. However, the cost-effective rooftop potential of solar PV of existing buildings in the EU is huge, estimated to be about 680 TWh, or 25% \(!\) of current electricity consumption.](#) Just as for the overall renewable energy trends, these figures are stupefying and yet promising: given the emergency (= stupefying), ***we simply cannot afford not to undertake everything possible to plant PVs on every available rooftop*** (= promising), and make people benefit from clean and green energy.

This is why the PVP4Grid partners call on decision-makers in the EU's capitals and Brussels to take rapid action and consequently remove barriers that were [identified in course of the PVP4Grid project](#), and that prevent Europeans from becoming PV prosumers. We must give access and encourage everybody to use the sun to make their own electricity, whether that is in urban or rural areas, in single or multi-apartment houses, as landlords or tenants, individually or in communities, for residential or industrial purpose.

If we want to limit global warming, we cannot have PV prosumers dealing with lengthy administration procedures, leaving people without proper information and financial incentives, preventing new prosumers from getting easily connected to the grid, or else having countries not





establish nor maintain reliable framework conditions. To national governments and regulators: we ask you to establish regulation that supports self-consumers and energy communities, by consequently transposing the recently adopted “Clean Energy for All Europeans” into national legislation. To EU institutions: we ask to step up the pace on the road to decarbonisation and make the “European Green Deal” go beyond existing EU targets and rules, to get PVs on every available roof space and have many more people taking part in it.

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