EUROSOLAR Call for Action 2021: The Regenerative Europe Decade

For a healthy planet, being neutral is not enough

Climate neutrality and ‘Net Zero’ by 2050 are universally accepted slogans. Yet such concepts are not only difficult to implement due to their complexity and vagueness, and insufficient as goals for societal continuity and survival – they are also set far too far in the future. It is irresponsible to demand climate neutrality at nearly 420 parts per million (ppm) of CO$_2$ in the atmosphere today —likely to be more than 500 ppm by 2050 — when 280 ppm is the stable level. Calls for systemic action must always demand climate positivity — or net negative emissions.

It is also clear that the Paris Climate Agreement is aimed at insufficient goals. Two degrees of increase, even 1.5 degrees, were already too much for the stability of the earth’s cryosphere. From the Arctic to Greenland, from the permafrost across glaciers worldwide, all the way to Antarctica: it all began to visibly melt away at only half a degree increase. Today, the average global warming compared to the actual pre-industrial time before 1750 has very likely already exceeded 2 degrees today. To distract from this error, official reports and unofficial goals alike now only refer to 1860, 1990 or even 2006 as reference years.

Not only have CO$_2$ emissions risen to today’s 150% of stable concentrations, and are still increasing: methane concentrations are already three times higher than a stable climate would tolerate over time: now at over 1900 ppb instead of 600. A large and sudden Arctic methane release due to seabed permafrost melting is presently the most immediate climate threat to our civilization. Equally ignored in the public decisionmaking process is the deoxygenation of the atmosphere and oceans, which is inexorably accelerating under current conditions. Fossil resource combustion is the largest anthropogenic factor here. This currently releases as much CO$_2$ annually as atmospheric oxygen (O$_2$) is being destroyed. Due to feedback some researchers project the possible complete loss of atmospheric oxygen within a few thousand years.

The so-called carbon budget — the supposed possibility of emitting ever more waste gases without taking any significant risk — is an excuse to pursue business as usual. The global terrestrial carbon management system, weakened by over-exploitation of biospheric resources, is so sensitive that the slightest fluctuations in GHG concentrations and temperatures spell disaster. In fact, this so-called budget was already exceeded by the time CO$_2$ concentrations had substantially exceeded 280 ppm: by 1990 they were already above 350 ppm. Only the ending of fossil carbon emissions, the rapid ushering in of the ‘Solar Age’ of 100% renewable energy supply - and withdrawal of excess GHG concentrations from the atmosphere through biospheric regeneration and other measures, and permanent removal of excess atmospheric carbon on a large scale can slow down this process.

None of the European plans, not the European Green Deal, nor any of the EU member states, none of the leading parties, and no leading politician has yet faced up to this problem — and practically none of the climate experts themselves. Everyone talks about climate neutrality as a miracle cure, even though this is misleading and wastes precious time as a distant moving target. The critical targets — temperatures, concentrations — along with emissions are all below, not above, current levels.

Much more powerful methods are needed than are currently being considered and debated in cabinets and parliaments in Germany, Europe and around the world: this is tantamount to a general mobilisation. Nevertheless, they are possible, relatively simple and existentially inevitable.

These include the following points of EUROSOLAR’s Regenerative Decade (earthdecade.org) as declared since January 2020 at the Executive Committee (Board) level:
1. The redefinition of emission targets is the logical conclusion from the realisation that climate neutrality alone is not enough, and that so-called zero emission targets alone are no longer sufficient. The global economy needs strategies that are capable of lowering greenhouse gas (GHG) concentrations in the atmosphere.

2. The mobilization of a climate defense budget for the rapid phase-out of fossil fuels, transformation to 100% renewables and wider measures within less than ten years — this will represent a significant percentage of the gross national product, many times the size of most national defence budgets. If 80–100% of the remaining Covid-19 stimulus funds were also spent in this way, two major crises would be dealt with with one swoop.

3. Implementing climate emergency diplomacy and ending armed conflict in the common interest of fighting for survival against the common enemy — fossil fuel powered global warming. This includes European and global, effective and open climate migration management planning. Several billion fellow human beings will soon have to look for a new home, even under the comparatively optimistic BAU assumptions of RCP 8.5.

4. The restructuring of fossil and nuclear industries through substitution into renewable energy programs, the removal of fossil subsidies and structural measures and transformation assistance. There is also a resilience reason for this: as the planet heats, conventional power systems become ever more dangerous through the evaporation of cooling water, rising ambient temperatures and plummeting electricity conductivity. Precedents are the transformation of the telecommunications industry, or the restructuring of declining steel and coal manufacturing in the 20th Century.

5. The classification of fossil fuel resources as lethal: their extraction and distribution should be declared unacceptable after a short transition period and, as a first step, they must no longer be subsidised but become heavily taxed at the source of extraction.

6. Biosequestration: the rapid build-up and renaturation of healthy, climate-active agricultural soils, wetlands and forests is an essential and corollary part of climate stabilisation attempts.

7. Industrial sequestration: the commitment of the construction industry and all productive industries and manufactures to carbon removal and material product binding processes. This means conversions of atmospheric CO₂ into sustainable wood, carbon fibre and other solid carbon products and mineral forms.

8. Full exploitation of unprecedented productivity and innovation boosts for massive expansion of quality employment opportunities for all new citizens: existing and new climate refugees.

9. The replacement of employment in the fossil and nuclear industries by prioritised structural reforms towards renewable industries is especially welcome, too. All experience suggests that these renewable industries make far greater contributions to employment and foster innovation.

10. New financing mechanisms are needed that reward long-term investments such as defossilisation, agricultural reform and forestation with higher returns today than short-term investments. Needed now are ‘future banks’ that create currencies structured to encourage investment and whose spending is linked to sustainable products and services.

The European Delegates’ Assembly of EUROSOLAR, the European Association for Renewable Energy, calls for the REGENERATIVE EUROPE DECADE as a sharper focus and tightening of the European Green Deal, to go beyond paying lip service in the form of climate neutrality and rapidly shifting towards 100% renewables, carbon sequestering agriculture, afforestation with drought resistant forests and the reframing of the European circular economy directives into economy-wide carbon sequestration rules and regulations.

Goal and reality must be a renewably climate-positive, emissions-negative Europe.