RENEWABLE ENERGY AND CLIMATE CHANGE STRATEGY THE RECCS REPORT

A better alternative to burning forest biomass

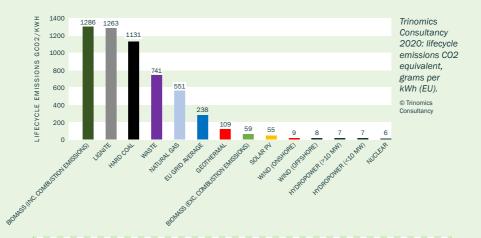
"AS CLIMATE CHANGE WORSENS, THERE IS Literally no time for false solutions."

THE FOREST BIOENERGY CRISIS

Solid (forest) biomass represents the largest category of so-called renewable energy in the Europe, absorbing 8 billion EUR of official subsidies per year. It is spreading rapidly on a global scale.

Subsidies will rise steeply, in Europe alone, to over 37 billion EUR pa by 2050, if plans for Bioenergy with Carbon Capture & Storage (BECCS) are adopted.

Yet burning forest bioenergy for power produces higher emissions than the fossil fuels it is meant to replace, even coal. Assumptions of carbon neutrality are based on flawed accounting.



This is having a devastating impact:

climate change is worsened, the Paris Agreement targets for 2030 and 2050 are made significantly harder to achieve

<u>ش</u>

massive areas of biodiversity rich, carbon sink forest are being destroyed, and respiratory health is widely compromised

consumer and taxpayer income is being wasted on a huge scale – despite achieving the opposite of what is claimed

Even with adoption of BECCS, hitherto untried at scale and hugely expensive, emissions would remain much higher than from all renewable sources.

"It is well established that burning forests to generate electricity is counter-productive, wasting public subsidies to make climate change worse. Supporting forest-based BECCS would just be throwing good money after bad. This RECCS Report however shows what can be achieved if those huge subsidies are efficiently spent elsewhere".

Professor Mike Norton, Head of Environmental Policy, European Academy of Sciences Advisory Council (retd)

RENEWABLE ENERGY & CLIMATE CHANGE STRATEGY THE RECCS REPORT

A 150 page RECCS Report commissioned by the Wild Europe Foundation has just been published by Trinomics Consultancy, energy advisors to the European Commission and national governments.

The Report calls for cessation of subsidies for commercial scale bioenergy and their reallocation, together with incentivised matched funding, to support effective alternatives for addressing climate change:

- Near zero carbon renewables: such as wind, solar, marine and geothermal energy, together with heat pumps (particularly industrial) and storage/ transmission infrastructure
- Demand reduction: insulation (particularly deep renovation of residential buildings), materials recycling, fuel efficiency, decarbonised industrial process technology



- Utilisation of the Nature Based Solutions (NBS) agenda: to secure protection and restoration of carbon absorbent ecosystems: forest, wetland and salt marsh in particular
- Matched funding, incentivised by subsidy reallocation: corporate input redirected from bioenergy and general investment, official and institutional support, Payment for Ecosystem Services agenda, tax revenue

The Report shows how, at a fraction of the cost, forest bioenergy could be replaced, delivering significantly greater benefits in emissions reduction, improved air quality and health, broader economic development, sounder investment opportunities and extensive preservation of natural ecosystems.



A HIGHLY EFFECTIVE RANGE OF BENEFITS

Following careful cost-benefit assessment for each of these alternative approaches, the RECCS Report identified a range of highly significant benefits in the European Union:

- By 2030, emission savings of 177 MtC02e per year - 15% of the European Union net zero goal
- By 2050, emission savings of 870 MtC02e per year - 26% of the European Union net zero goal
- The alternative renewable energy can be supplied much more cheaply, at roughly 25% of the cost for electricity by 2050, saving around 40bn EUR per year on overall power costs. It will also help address the growing problem of fuel poverty
- Overall with extra investment drawn in by RECCS, and dependent on speed of subsidy switch, by 2050 RECCS could deliver an additional 94 billion EUR per year in Gross Value Added and over 1.6 million in extra generally higher tech employment.
- Sounder investment prospects: little or no dependency on subsidy, security of supply, productivity growth and much lower political risk

- National and EU agendas for economic competitiveness, anti-inflation and consumer wellbeing all significantly supported
- Improvement in air quality, particularly reduced particulate matter (PM), lowering rates of respiratory and other diseases
- Around 50 million hectares of additional natural ecosystems restored & protected by 2050, dependent on policy, gearing, costs and land availability. This could help secure over 30 GtC02e of carbon sink capacity
- By 2050 RECCS could fund deep renovation of more than 8.8 million EU households. The energy savings that can be achieved lead to a reduction in EU annual residential heat demand of more than 156 TWh, around 9% of estimated residential heat demand
- RECCS could lead to the adoption of industrial heat pumps to meet 53% of industrial final energy consumption by 2050

WIDER REPLICATION OF THE RECCS APPROACH

While the RECCS Report focuses mainly on Europe, feedback from associates suggests it can be replicated in different combinations. This particularly applies in East Asia and North America, and wherever industrial scale solid biomass feedstock or power production facilities are developing.

To download a copy of the Report: www.reccs.eu