Glastuinbouw Nederland
growing for tomorrow today

Position paper

Clean Industrial Deal

Fruits, vegetables, flowers, and plants climate-neutrally grown. That is our ambition for 2040. Our growers are eager to rapidly reduce their dependence on fossils through scaling the production of renewables and improving energy efficiency. Decarbonising our energy-intensive sector is at the heart of our future competitiveness as it reduces our footprint, tackles high energy costs, and boosts Europe's sovereignty. Delivering on our climate action ambition in a way that is fair, enables clean growth and supports sustainable food and floriculture production in the EU. To turn our decarbonisation into a driver for clean growth, controlled environment agriculture (CEA) welcomes the Clean Industrial Deal and the Affordable Energy Action Plan.

Fruits and vegetables are not just delicious but healthy too. Europe's growing and aging population does not just need more healthy nutrition in order to be fed, but also to foster its public health and well-being. Meanwhile, flowers and plants green and cool our cities, restore biodiversity, mitigate climate change, and improve people's health.

To meet year-round demand for fruits, vegetables, flowers, and plants in Europe, CEA like greenhouses needs heat and light to establish optimal climate conditions to grow crops every day of the year. Access to renewable, non-fossil, and affordable power supply at farm level is a key enabler in the decarbonisation of CEA. Renewable energy and biogenic CO_2 infrastructure development and championing energy efficiency innovations will be vital to make this transition while tackling high energy prices.

Prioritising renewable energy grid development

Replacing fossils with residual heat from local industry, geothermal heat, green electricity, heat pumps, hydrogen, and biomass could accelerate our transition towards climate-neutrality in 2040. Phasing out fossil fuels in CEA requires tapping new renewable energy and CO_2 sources and smartly connecting energy supply and demand to boost circular energy use across economies. Developing and exploiting new sources of renewable CO_2, heat, and electricity as well as expanding their grids is a priority to achieve this. Partly this is in technology development, but mostly it is about mobilising finance and cutting permitting times to smoothen the deployment of grid, energy storage, and renewables projects.

Prioritising renewables infrastructure development around CEA brings substantial societal benefits. Firstly, our energy-intensive growers could generate geothermal, solar, and wind energy on a large scale to ensure local and stable heat and electricity supply. Above all, CEA has the capacity to store heat and electricity. This means that our growers store heat and electricity during the day, at night, or in summer – when demand is low – and release it again during peak times to households, SMEs, and public facilities. In this way, we relieve the burden on the local grid, stabilise local supply, and make optimal use of all available renewable heat and electricity in the Union whereas decarbonising as sector.

To enhance renewable energy grids in Europe:

- The **European Grid Package** should prioritise and fund tapping new sources of geothermal and residual heat, solar and wind energy, hydrogen, and biogenic CO_2 and expand grids and storage near CEA – and the agricultural sector in general – to decarbonise both sector and local community. To ensure an attractive yet green business climate in Europe, the access to renewable energy grids should become a major pillar in Member State's spatial planning policy.

- The **Industrial Decarbonisation Accelerator Act** should promote statutory deadlines for permitting, secured by a permit by operation of law when exceeded, to cut time and provide legal security to investors in renewable energy projects. In line with the Nature Restoration Law, plans or projects of overriding public interest – i.e., energy grids – should be prioritised in granting permits.
- The **InvestEU Regulation** could encourage renewable energy projects by energy-intensive industries as CEA by co-financing investment costs (e.g., construction and labour costs or expenditures for financing, investment decision, and commissioning) to remove unprofitable peaks in realising those projects, as, for instance, the SWIG has effectively been bolstering heat grid expansion around CEA in the Netherlands.

Boosting energy efficiency
Saving energy is the first step towards establishing a climate-neutral society. So too in CEA, where with boosting energy efficiency, our growers require 35% less heat by 2040 than in 2017. New innovations to take this further should be encouraged, also because they might later boost efficiency in the rest of our society like LED lighting. Moreover, growers see energy efficiency as making smarter use of energy by avoiding demand. Storing heat with HT-ATES or MT-ATES and electricity in batteries during off-peak hours helps growers to make best use of the available renewable energy by recovering it at peak times. This saves energy along the year. With capturing CO_2 from industry (CCU) or direct air capture (DAC), the CO_2 indispensable for plant growth could be obtain without fossils as well.

To boost energy efficiency in Europe:
- The **Industrial Decarbonisation Bank** and the **Clean Energy Investment Strategy** should back the adoption of less profitable and the development of promising innovations such as heat storage (HT-ATES/MT-ATES), CO_2 recycling (CCU and DAC), hydrogen, and SMRs to maximise emission reduction in CEA – acknowledging growing food and floriculture as a key industrial process – and local community by exploiting the sector as local energy generator and storage.
- The **Industrial Decarbonisation Accelerator Act** should promote innovation to enhance energy efficiency in CEA by prioritising support for energy-intensive sectors in national decarbonisation programmes. This should also allow financing demo projects to test promising yet premature innovations. To secure sufficient biogenic CO_2 supply for plant growth and avoid CO_2 supply through cogeneration (CHPs), CCU must remain competitive with carbon capture and storage (CCS).
- The **New Rules on Demand Responses** should enable the participation of CEA in heat and electricity storage by balancing local heat and electricity supply and demand through their HT-ATES, MT-ATES, or batteries. To truly lower energy costs for all, the principle of the NR DR should thus move beyond traditional electricity towards heat. Flexible energy use by CEA could be stimulated by making transmission tariffs flexible so that they are demand-based. For the moment, they are conditioned on your capacity, making flexible energy use financially unattractive despite CEA being fully geared to flexible energy use and supply.

Affordable energy
Energy prices in the Union are higher than in most other industrial economies, presenting a fundamental competitiveness challenge. Lowering prices is paramount to maintaining CEA's international frontrunner position, keeping food and floriculture in Europe affordable, and to investing in clean growth. The main purpose of energy taxation should be generating state revenue, not pursuing climate objectives. This prevents overpricing and disincentivising renewables over fossils. Reducing network charges could likewise advance electrification of energy-intensive sectors like CEA.

To lower energy prices in Europe:

- The **Recommendation on energy taxation** should call for a flat rate, where everyone – from citizens to industry – pays the same amount for their gas and electricity. A fairer system, in which tax exemptions for industries are no longer necessary. The main purpose of energy taxation would return to generating state revenue, so that there are no perverse incentives for the adoption of renewables. Additional CO_2 pricing should be applied per sector, so that each industry actually achieves its CO_2 reduction targets. The level of this sectoral CO_2 pricing shall be determined based on the measures and investments needed to meet the industry's climate objectives as the cost of emission reduction varies greatly from one sector to another. This ensures just the right incentive for energy-intensive industries to decarbonise yet avoids overpricing and becoming uncompetitive.
- The **Recommendation on network charges** should propose to Member States to socialise network charges by spreading out the recovery of costs. There will be significant investments in the electricity grid in the coming years. However, the benefits of these investments will accrue to future users too, who still have to switch to electricity. It is therefore unfair to place this recovery of costs solely on existing users. Not only does this undermine Europe's industrial competitiveness but also make the business case for electrification financially less attractive.
- **Power Purchase Agreements (PPAs)** have great potential in CEA, especially for interacting with wind farms that perfectly fit the sector's demand profile. Lower contract prices could encourage such collaborations to reducing energy bills.

Glastuinbouw Nederland | Union of Dutch Greenhouse Growers
Head of Brussels Office Mr Jesse Schevel
Trierstraat 59-61 | 6th floor | 1040 Brussels
+31 6 531 575 73 | jschevel@glastuinbouwnederland.nl