How Biofuels Can Supercharge the EU's Drive to Carbon Neutrality

Renewable ethanol is the most immediate, cost-effective, sustainable and socially inclusive way to reduce emissions. Europe cannot afford to ignore this important part of the Fit for 55 equation, and should take these actions to improve the policy.

By Emmanuel Desplechin | December 26, 2021

The European Union has launched an effort to supercharge its energy and climate laws to meet ambitious emissions-reduction targets by 2030 and be better positioned to achieve carbon-neutrality mid-century. But the wide-ranging proposals in this so-called "Fit for 55" package do not always give enough of a role to a proven decarbonization solution: renewable liquid fuels such as European ethanol.

Fully enabling biofuels in the drive to carbon-neutrality is just common sense. Even under a scenario in which electric vehicles make rapid gains in market share and the sale of internal combustion engines is phased out, the EU car fleet will consist predominantly of vehicles that run fully or partly on liquid fuel in 2030 and beyond.

For these petrol and hybrid cars, the EU has a ready-made, homegrown solution: renewable ethanol is the most immediate, cost-effective, sustainable and socially inclusive way to reduce emissions. Europe cannot afford to ignore this important part of the Fit for 55 equation. The Fit for 55 proposals include everything from another revision of the EU's Renewable Energy Directive (RED) to CO2 standards for cars to the Energy Taxation Directive. Here's an overview of how policymakers should improve these important pieces of legislation to make Fit for 55 fit for purpose:

Improve the RED

The current target for renewable energy in transport was insufficient to achieve the EU's decarbonization objectives as set out in the European Green Deal and the 2030 Climate Law. By removing the use of multipliers that only hide the EU's continued reliance on fossil fuel, the new RED proposal is an improvement. But more can be done. To fully unlock the potential of the RED, the EU should: Set higher GHG-reduction targets for renewable energy in transport; promote sustainable crop-based biofuels and give Member States control; continue the deployment of advanced biofuels and enforce existing compliance rules; and ease the deployment ethanol blends, making E10 standard and providing incentives for higher blends.

Be Realistic about 'Zero-Emission' Vehicles

The Commission's decision to set a 100% CO2 emissions-reduction target by 2035 is a de facto ban on sales of new cars with internal combustion engines. It is based on an unrealistic accounting of vehicle emissions: by focusing solely on tailpipe emissions, the proposal misleadingly labels battery electric and fuel cell vehicles as "zero emission." This distorts competition between powertrain technologies, contradicts the principle of technology neutrality and ignores the emissions-reduction contribution of renewable fuels.

Instead, the EU should incentivize better fuels based on well-to-wheel CO2 emissions and make better use of existing sustainable renewable fuels like European ethanol.

GHG-Based Taxation Policy

With its lower energy content compared to petrol, renewable ethanol is the most heavily taxed fuel in the existing EU taxation regime. The Commission's proposal to move away from volume-based taxation should help sustainable biofuels compete with fossil fuels. But by excluding "sustainable food and feed crop biofuels" from the category of "sustainable biofuels," and increasing their minimum taxation level over time to reach the same as fossil fuels, the Commission's proposal for a new ETD is inconsistent with RED II. For a fairer, more sustainable Energy Taxation Directive, the EU should be consistent and promote renewable fuels over fossil fuels based on GHG reduction.

As one of the best such tools, European ethanol must be considered more than just a "transition fuel" or "stopgap solution" in the EU's planning. It is a proven solution that is already delivering results for decarbonization, but with the right policy choices it could do a lot more in the years to come.