The advanced biofuels industry requires a clear, consistent and comprehensive policy if they are going to move efforts forward.

**Calls for clear mandate**

Road transport is one of the few industry sectors where carbon dioxide emissions have risen greatly in recent years. According to the European Commission (EC) the transport sector is well on its way to becoming the European Union’s biggest source of CO₂ by 2030. If advanced biofuels reach their calculated potential, the CO₂ savings could range from 60% to 85% in most cases and thus make a significant contribution to the EU’s climate targets.

The potential for growth and profitable biofuels business is there. The Wasted: Europe’s Untapped Resource report published by the European Climate Foundation, International Council on Clean Transportation, the biofuels industry, and NGOs such as WWF, Transport & Environment, and Birdlife, concluded that converting all sustainably available forestry, agricultural and municipal wastes and residues in the European Union to biofuels could cover up to 16% of road transport fuel in 2030. The report also states that up to €15 billion of additional revenues could flow to the rural economy annually and 300,000 additional jobs could be created by 2030.

Europe is taking action to reduce greenhouse gas (GHG) emissions and advanced biofuels are a key part of the solution, because they do not compete with food and have a considerably lower environmental impact than fuels made from petrol or natural gas. However, EU policy must be directed towards accelerated industrial research and innovation into emerging biofuel technologies supported by public and private policies promoting deployment.

The coming year will be critically important for the industry as important legislation is being prepared in the EU. The revision of the Renewable Energy Directive (RED) will be debated in the newly elected European Parliament, member states will discuss EU policy for post 2020 and preparations for global climate negotiations are underway for the United Nations Climate Change Conference in Paris 2015.

**Investment needed**

It has taken almost two years of discussions about the renewal of the Renewable Energy Directive (RED), especially Indirect Land Use Change (ILUC), while the industry has been putting future investments in the low carbon fuel industry on hold. Now member states have come to a common position on an important, but vague, compromise on the renewal of the RED and the Fuel Quality Directive (FQD). The advanced biofuels mandate is essential to ensure investment decisions are made in Europe. Now the targets have been diluted to non-binding but hopefully the final directive will in the end ensure regulatory certainty for the sector.

The revision of the directive should be finalised during the Italian presidency, and the EU member states must agree in October’s Council meeting on a progressive and binding continuation of the advanced biofuels mandate beyond 2020. Advanced biofuels offer unique opportunities for the European economy and the environment. In order to secure investments to move forward, the EU must agree on
a clear pathway for advanced biofuels up to 2020 and beyond. Many member states already recognise the benefits of advanced biofuels and have set, or are about to set, demanding national targets.

**Sustainable recognition**

Every year the EC holds its EU Sustainable Energy Week (EUSEW) in Brussels – showcasing activities dedicated to energy efficiency and renewable energy solutions. It is designed to spread best practices, inspire new ideas and build alliances to help meet the EU's energy and climate goals.

The Sustainable Energy Europe Awards competition is part of EU Sustainable Energy Week, an initiative set up in 2006. The Sustainable Energy Europe Awards reward and promote Europe’s best sustainable energy projects in the fields of energy efficiency, renewables and clean transport. For the first time in the history of the award, second generation biofuels were nominated, and received the European Union’s Sustainable Energy Europe Award 2014.

UPM Biofuels won the award in the ‘Travelling’ category for its innovative approach in using the residue of their own pulp production, crude tall oil, as a new use of raw material for the production of advanced biofuels to lower GHG emissions. The winning criteria also included production supporting the local economy instead of importing fuel to the EU.

Winners were selected by a high level jury which included representatives from European institutions, European governments, energy agencies, specialist media and industry associations, and announced at the 2014 Awards Ceremony, hosted by EU energy commissioner Günther Oettinger in June in Brussels. The award was presented by Marie Donnelly, director of the Directorate-General for Energy in the EC. This recognition by the Commission is important for the whole second generation biofuels sector. It confirms that significant progress in sustainable advanced biofuels is noted.

Wood-based biofuels are a competitive option for forest rich areas, such as Europe and the US. Europe being the most forest-rich region in the world with 1.02 billion hectares of forest, which amounts to 25% of global forest resources. In fact the European forest industry is one of the few industries that has the capacity to sustainably develop large scale advanced biofuel production.

**Building energy independence**

The Ukraine crisis shows once again to what extent the EU relies on energy imports on a daily basis – today, the EU imports 53% of the energy it consumes. Approximately 90% of our crude oil and nearly 66% of our natural gas comes from third countries. The transport sector is no exception and 95% of EU fuel consumption is still based on fossil fuels. The EU spends more than €1 billion per day to pay its external energy bill. Thus the transport sector has a large and growing share in the final energy consumption as well as large CO₂ emissions. That, coupled with the increased dependency of the EU on imported fossil oil, is alarming.

The Commission has declared a commitment to promote sustainable biofuels and to reduce GHG emissions in transport by 60% by 2050. However, the lack of binding energy and climate targets for the transport sector in the EC’s White Paper on the framework for the EU’s climate and energy policy 2020-2030 is a concern. The EC must not close its eyes to this reality: the contribution domestically produced advanced biofuels can make to curb Europe’s dependence on rapidly depleting and polluting fossil fuels.

Produced from European-grown raw materials, advanced biofuels not only reduce our dependence on external energy sources but achieve a GHG saving of up to 95% compared to fossil fuel. It makes advanced biofuels even more climate friendly than the much touted electric cars, especially if well-to-wheel analysis instead of a tank-to-wheel calculation is used for both. The Communication on Energy Security comes at a time when the future of European energy and climate policy as well as the biofuels policy in particular are at stake. If EU leaders do not recognise the potential of advanced biofuels and adequately promote their deployment, investments will move to other regions in the world where the framework conditions are more favourable. EU member states will lose precious opportunities for creating new jobs and generating added value especially in rural areas and agriculture through the promotion of EU-based industrial development and innovation.

Do we want to stay dependent on polluting fossil fuels or do we want to harvest the potential of innovative biofuels technologies? The choice seems obvious. The EU needs to set a binding, ambitious and realistic target for advanced biofuels in 2020 and up to 2030 with a clear trajectory. It is high time the European Union showed leadership and agreed on a Europe-wide strategy.

For more information: This article was written by Sari Mannonen, director, sales & marketing, UPM Biofuels. Visit: www.upmbiofuels.com

*Forest-based biomass, either directly from forests or generated through industrial processes, offers a sustainable alternative for biofuel production*