

## Biofuels in Serbia

### Overview of Biofuels in Serbia

Serbia – along with 5 other Western Balkans countries – was identified as a potential candidate for EU membership in 2003. While formal application was filed in 2009, the status of Candidate Country has been granted in 2012, and the Stabilisation and Association Agreement entered into force in September 2013.

Since 2006, Serbia is also a Contracting Party of the Energy Community, thus committing to the establishment of a single European energy market, and binding itself to aligning to EU *acquis communautaire* in energy related matters, including renewable energy targets as well as relevant competition and state aid regulations.

In this framework, Serbia committed to a mandatory 27% target of RES in gross final energy consumption in 2020. In June 2013, the National Renewable Energy Action Plan (NREAP) has been adopted, envisaging also a significant increase RES-T, reaching 10% (from 0% in 2009).

Notwithstanding the obligation to provide the transport sector with approximately 245 ktoe from RES, investments in this sector are lagging behind due to market and regulatory uncertainties. The 10% target appears unmatchable in the given timeframes: installed biodiesel capacities are currently not exploited, while great reliance is made on imports (see table below).

	2009	2020
Bioethanol, ktoe	0	25
Of which imported, %		57
Biodiesel, ktoe	0	220
Of which imported, %		60
<b>Total, ktoe</b>	<b>0</b>	<b>245</b>

(data based on NREAP, courtesy prof. M.Martinov, FTN)

Unfavorable climate is determined by uncompetitive taxation and lack of incentives. Moreover, some key regulatory measures are not implemented or missing, such as in the case of monitoring and reporting requirements, or certification.



### Country information

Serbia	
Population	7,115,000
GDP (PPP per capita)	\$13,594.1
Final Energy Consumption (Mtoe)	8,4
Final Energy Consumption in Transport (Mtoe)	2,1
Final Energy Consumption in Transport Share	25%
Biofuels share in Transport Fuels	n/a
Fuel-Mix	Gasoline, Diesel Biodiesel

### Biofuels policy, regulations, market development

In Serbia improvements are being made, with a new Energy Law adopted on 29<sup>th</sup> December 2014, that – however – delegates the Government to issue a specific set of by-laws related to biofuels (namely: the Decree on Quality of oil products and biofuels; the Decree on Biofuel blending mandates; the Decree on Sustainability criteria for biofuels; the Decree on Incentives for biofuels). Standards have been aligned (SRPS EN 14214, SRPS EN 15376).

Likewise, according to the Law on Incentives in Agriculture and Rural Development (2013), the Government shall determine the total available budget for incentivizing energy crops on a yearly basis.

It shall be noted, that incentives are not conditional to compliance with sustainability criteria set in Directive 2009/28/EC. In the past years, there has been quite some marketing concerning DIY biodiesel solutions, which have brought to a share of grey production: not being measurable, this phenomenon entails negative environmental effects and weaken the “greening the transport” message.

### Advanced biofuels demonstration and R&D Projects

Notwithstanding the relevant potentials in terms of feedstock availability, technical competences and specific measures for attracting foreign investments biofuels deployment and supply are still extremely limited in Serbia. This owes mostly to the fact that the discontinuation of an excise duty exemption for biofuels in 2013 determined unfavourable market conditions, but also the apparent preference towards imports. At present, four plants with a total annual capacity of 0.07 Mtoe exist in the country, yet none is currently producing biodiesel (Victoria Oil - up to 100kT biodiesel per year; FAM Krusevac - 25kT/yr; Bioplanta - Backa Topola - 20kT/yr; Bioenergo Oil – Sombor - 1.4 kT/yr).

According to the estimations provided in the NREAP, domestic production should have fulfilled approx. 40% of the needs in 2020 (100.000 t/y biodiesel and 17.000 t/y bioethanol). Current installed capacities are slightly lower, yet it is probable that without targeted stimulation the share of imports might be even higher than the prospected 60%. At the same time, there might be some draining of feedstock towards other bioenergy/bioeconomy uses, or – most likely – for export.

### Biofuels ministries, organisations and agencies in Serbia

Ministry of Energy, Development and Environmental Protection

Provincial Secretariat for Energy and Mineral Resources-PSEMR

Standing Conference of Towns and Municipalities of Serbia-SCTM

Serbian Biomass Association-SERBIO

Autonomous Province of Vojvodina

Provincial Secretariat for Energy and Mineral Resources

### Key biofuels industry and research stakeholders

Bridge Power Investments

Faculty of Technology, University of Niš

Faculty of Technology, University of Novi Sad

Innovation Centre, Faculty of Mechanical Engineering, University of Belgrade

MK Group d.o.o

Faculty of Technical Sciences, Novi Sad

Mirotin Energo, Vrbas

Biodizel Co.

Biodizel.NiCroTehna

Bio-Dizel Solutions