









Sustainable exploitation of biomass for bioenergy from marginal lands in Europe

SEEMLA Newsletter - December 2018

Dear Reader.

The European Union's Horizon 2020 funded SEEMLA project has been going for three vears!

We are proud of the accomplishments that resulted during the projects duration in regard to meeting the EU's reduction greenhouse gas (GHG) emissions goal by 2050.



The Seemla kick off meeting in 2016

The pilot case studies in Germany, Greece, and Ukraine were finalized with important results verifying the SEEMLA approach. Additionally, the results of the life cycle assessment (LCA) on the biomass production of MagL, as well as the SEEMLA GIS-tool have been made available.

This final web-based tool version provides assistance identifying and exploiting marginal lands based on the SEEMLA developed soil quality rating (SQR) score.

This second half of 2018 consisted of SEEMLA project partners actively collecting and finalizing results that were presented during the SEEMLA final conference that was held on 20.11.2018 in Brussels.

This event was held as a cooperative event to H2020 EU funded ADVANCEFUEL project workshop (20 th and 21 st November 2018). The SEEMLA project team presented their main results by showing the project pilot cases in Germany, Greece, and Ukraine, by describing their specific approaches regarding the use of marginal lands for biomass production. Additionally, the Life Cycle Assessment (LCA) and the SEEMLA GIS tool were presented initiating a productive discussion between stakeholders from other EU funded projects like MAGIC, GRACE, FORBIO, BECOOL, uP-running, and LIBBIO. These projects presented their results and specific case studies at the conference (More information here). At this point, we would like to invite you to follow the activities of SEEMLA as the project is in its final

In case you are interested, you can find a lot of useful information, events, and reports on our website: seemla.eu

We wish you a merry Christmas and a Happy New Year! On behalf of the SEEMLA consortium,

Best regards Diego Piedra-Garcia (FNR, project coordinator)

The SEEMLA FINAL EVENT



SEEMLA & ADVANCEFUEL projects held a shared event the 20th– 21st of November 2018 in Brussels, Belgium. These projects are coordinated by the FNR, and funded by the EU H2020 programs. The first part of the event consisted of the SEEMLA final conference, which implemented a sustainable land-use strategy for a sustainable production of plant-based energy on marginal lands. The so-called, "SEEMLA approach" was developed as an integrated set of environmental, ecological, social, economic, and biophysical criteria, in order to re-convert degraded and marginal lands in the name of the production of bioenergy. The results of the ending SEEMLA project were shared with a broad group of stakeholders (scientists, farmers, foresters, policy decision makers, etc.)

The SEEMLA's final conference began with a presentation from Maria Georgiadou, (DG Research and Innovation, and European Commission), who gave an overview about current and future R&D policy support regarding advanced biofuels and bioenergy. She positively acknowledged the cooperative effort of all the participating projects, and encouraged the project representatives to continue this form of collaboration, which helps in harmonising results as well as developing obvious synergies. Afterwards, SEEMLA's coordinator and chair of the event, Diego Piedra-Garcia (FNR), introduced the project. The SEEMLA project team presented their main results by showing the project pilot cases in Germany, Greece and Ukraine, by describing their specific approaches regarding the use of marginal lands for biomass production. They highlighted opportunities and potentials, as well as the challenges involved in the use of marginal lands – particularly with a view to ecological and socio-economic impacts. Additionally, the Life Cycle Assessment (LCA) and the SEEMLA GIS tool were presented, initiating a productive discussion between stakeholders.

Lastly Mr. Diego Mattioli, representing Legambiente onlus, underlined the importance of the exploitation of biomass in a sustainable way. Sustainability has to be considered as a key word for the

energy transition process: indeed, the exploitation of biomass has to valorise and not interfere with the ecosistemic function and services, particularly in relation to mitigation and adaptation to climate change and it has to guarantee the preservation of the biodiversity and existing habitats in the marginal lands concerned.

These presentations were a smooth transition to the following SEEMLA & ADVANCEFUEL joint workshop, which began in the afternoon of the 20th and continued into the following day, bringing together a number of other relevant topics related to European projects and relevant stakeholders, to discuss innovative cropping systems and the supply chains for lignocellulosic biomass. MAGIC, GRACE, FORBIO, BECOOL, uP-running, and LIBBIO, are all EU funded projects that presented their results and specific case studies at the conference.

The workshop was led by the ADVANCEFUEL partners Philipp Grundmann, Sonja Germer, and Katharina Sailer from Leibniz Institute for Agricultural Engineering and Bioeconomy (ATB).

ADVANCEFUEL's coordinator, Kristin Sternberg (FNR), welcomed the participants to the workshop and gave a short introduction to the project. She highlighted the fact that this particular section of the workshop included eight European project partners working together in order to achieve results on shared issues.

The representatives from the contributing other projects (MAGIC, GRACE, FORBIO, BECOOL, uPrunning, and LIBBIO) each briefly presented their projects and specific case studies. After the presentations, three interactive sessions were carried out on the following topics:

- 1. Cost reduction versus impact on the environment
- 2. Success stories and failures regarding lignocellulosic biomass value chains
- 3. Feedstock for advanced biofuels: market opportunities and constraints

The topics were discussed in smaller groups involving specific analyses (in terms of strengths, weaknesses, opportunities and threats (SWOT)) of the selected scenarios. The results were subsequently presented to and then discussed with the entire group. The ADVANCEFUEL team will use the workshop's outcomes to better determine the barriers involved in biomass production, as well as for describing promising strategies for successful feedstock provisioning in producing advanced biofuels. The workshop results will be an important contribution to the related ADVANCEFUEL reports, tools, and models.

This unique workshop was a collaborative effort of eight relevant topic-related European projects with numerous external stakeholders. The participants gave positive feedback and were very satisfied with this mutual exchange of experiences.

Click **HERE** to download the power point presentations of the event



Read our latest publications!

SOIL: Assessment and quantification of marginal lands for biomass production in Europe using soil-quality indicators

December 2018 - SOIL, an international scientific journal of the European Geosciences Union, has published an article about the Seemla assessment and quantification of marginal lands for biomass production in Europe using soil-quality indicators.

Thanks to the authors: W.Gerwin, F. Repmann, D. Freese from Brandenburg University of Technology Cottbus-Senftenberg; S.Galatsidas, D. Vlachaki, N. Gounaris from Department of Forestry and Management of the Environment and Natural Resources, Democritus University of Thrace; D. Keramitzis, F. Kiourtsis from Decentralized Administration of Macedonia & Thrace; W. Baumgarten, C. Volkmann from FNR-Fachagentur Nachwachsende Rohstoffe

Click here for the full article

BIOBASED FUTURE: Mapping marginal land for bioenergy: the SEEMLA approach April 2018 - "Biobased future", a newsletter from the International Energy Agency (IEA) published an

article about "Mapping marginal land for bioenergy: the SEEMLA approach".

Thanks to the authors: S. Galatsidas, N. Gounaris, D. Vlachaki, E. Dimitriadi from the Democritus University of Thrace, and C. Volkmann, FNR.

Click **here** for the full article

BE-SUSTAINABLE MAGAZINE: Unveiling the bioenergy potential of marginal lands through geospatial analysis

March 2018 - BE-Sustainable - a magazine from the ETA-Florence Renewable Energies - has published an article about the SEEMLA GIS-tool, entitled "Unveiling the bioenergy potential of marginal lands through geospatial analysis".

Thanks to our partners for their contribution: S.Galatsidas, N.Gounaris, D. Vlachaki, E. Dimitriadis from DUTH, Greece; C. Volkmann, W. Baumgarten, FNR, Germany

Click here for the full article

BE-SUSTAINABLE MAGAZINE: The potential of marginal lands for bioenergy

A SEEMLA article about the potential of marginal lands for bioenergy has been published from BE-Sustainable, a magazine from the ETA-Florence Renewable Energies.

Thanks to the authors: W.Gerwin, F. Repmann from Brandenburg University of Technology Cottbus-Senftenberg, C. Volkmann, W. Baumgarten from FNR; V. Ivanina from IBC&SB Click here for the full article

Dear followers,

following the new General Data Protection Regulation ("GDPR"), that came into effect last May 25, 2018, we inform you that the personal data and email address collected from the interested party or from public sources will be processed by LEGAMBIENTE ONLUS, on behalf of the Seemla project, for the purpose of sending communications about our services and will be saved as long as there is a mutual interest to do so. The data will not be shared with third parties, except when required by law. We inform you that you can exercise the rights of access, rectification, portability and deletion of your data and those of limitation and opposition to their processing by contacting f.barbera@legambiente.it

You can also cancel your registration at any time or change your data, by sending an email to: seemla-leave@newsletter.legambiente.it

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