

NoAW project

Innovative approaches to turn agricultural waste into ecological and economic assets

Horizon 2020 project : **2016-2020**

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What NoAW will offer?



NoAW aims to pave the way for a sustainable agro-waste bio-refinery concept by shifting from an a-posteriori environmental assessment to an early eco-design approach.

NoAW targets to unlock the <u>potential of agro-waste to be converted into a portfolio</u> <u>of eco-efficient products</u>: <u>bio-energy</u>, <u>bio-fertilizers</u>, <u>bio-packaging</u> and <u>bio-molecules</u>, in symbiosis with urban waste conversion.



Concept of NoAW:



The concept of the NoAW consists in involving all agriculture chain actors at the territory level in order to:

- > Develop innovative eco-design and assessment tools of circular agro-waste management strategies and address related gap of dialogue, knowledge and data;
- ➤ Improve agro-waste resources use efficiency by upgrading the most widespread mature technology and by eco-designing innovative bio-processes and products;
- Ensure and accelerate the development of new business concepts and stakeholders platform for cross-chain valorisation of agro-waste on a territorial and seasonal basis.



Major challenges:



NoAW will take up in a coherent manner, the five following major challenges for ensuring sustainable agro-wastes uses:

1. Inappropriate materials and knowledge flows management resulting in unbalanced nutrients distributions, contaminants accumulation and agro-waste conversion issues;



• *NoAW solution*: **territorial "cyclifiers"** i.e. stakeholders and materials streams connectors

2. Lack of adequate and early prediction of environmental and economic consequences of agrowaste management strategy and clear guidance to end-users;



■ *NoAW solution*: eco-design approach and multi-criteria decision tools



Major challenges:



3. Weaknesses of existing technologies for converting agro-wastes into biogas and bio-fertilizer;



• NoAW solution: innovative eco-efficient AD technologies

4. Bottlenecks for innovative building blocks, molecules and materials issued from agro-waste;



• <u>NoAW solution</u>: breakthrough technology on agro-waste conversion and bio-refinery concept

5. Lack of integration of agro-waste business in a circular economy concept;



 <u>NoAW solution:</u> a cross sectorial vision to bridge the gap between agro-waste science and business opportunity in order to promote agro-waste industrial ecology concept



Now the situation

NoAW's ambitions

25



Available





MTOE: million tons oil equivalent

Energy







FertIlizer





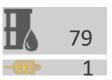
Plastics

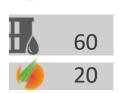




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Chemicals

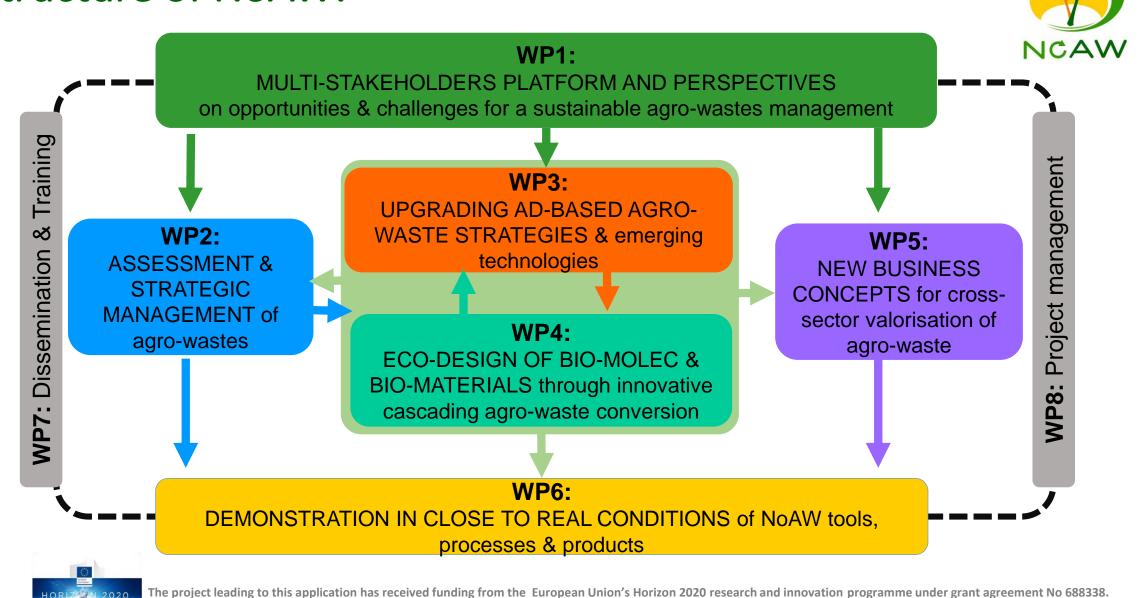




NoAW aims to substitute
non renewable oil and
noble food resources
With agricultural waste
that will be converted into
energy, fertlizer, plastics and
chemicals.



Structure of NoAW:





Thank you for your attention

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