

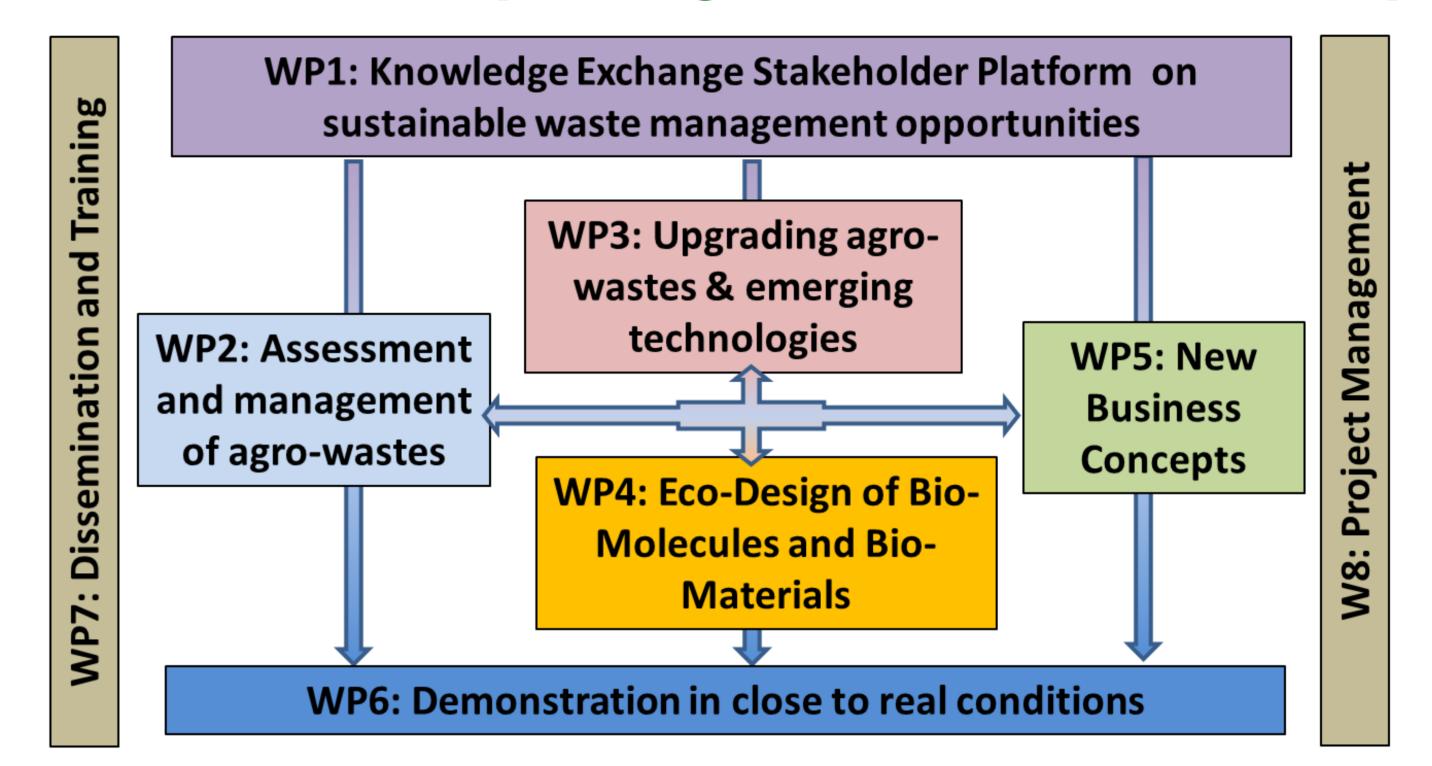
#### NoAW: No Agricultural Waste

Innovative approaches to turn agricultural waste into ecological and economic assets

#### What is NoAW about ?

a European Horizon 2020 research and NoAW is development project, running from 2016 to 2020, which aims to contribute to a "zero-waste economy" - an increasingly crucial issue in today's society. 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's work packages & their relationship:

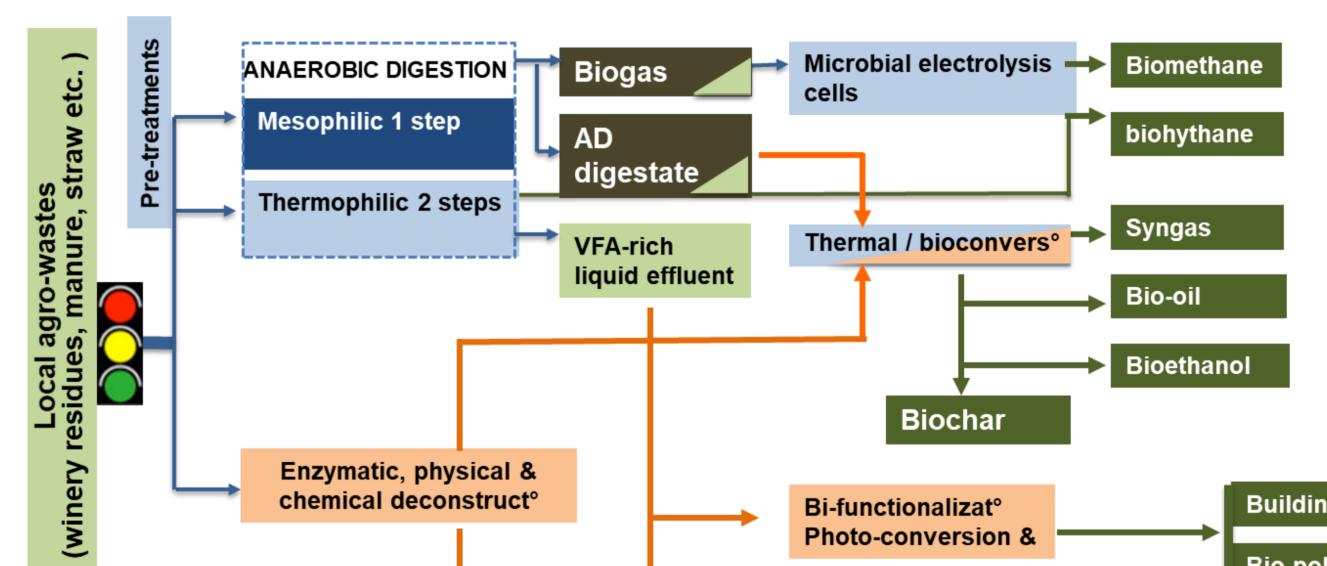


### NoAW's solutions:

NoAW project will bring about solutions for policy makers and enterprises to transform todays agro-waste to tomorrow's additional value:

- Create sustainable agro-waste bio-refinery concepts, integrative approaches, where ✓ Use special consideration is given to environmental impacts of the product and process even in design phase,
- ✓ Provide innovative and robust tools the tor development of waste-resource recovery strategies and minimizing the negative impacts on water, air, soil.

## NoAW's approach:



**Bi-functionalizat°** 

Photo-conversion 8

Microbial-convers°

Functionalisation

NoAW explores the potential of agro-waste to be converted into a portfolio of eco-efficient products which are produced using fewer resources and creating less pollution. The main focus is on **bio-energy**, **bio-fertilizers**, **bio**packaging and bio-molecules.

NoAW also considers environmental and human safety risks which can emerge from circular management of agro-wastes.

# NoAW's ambitions:









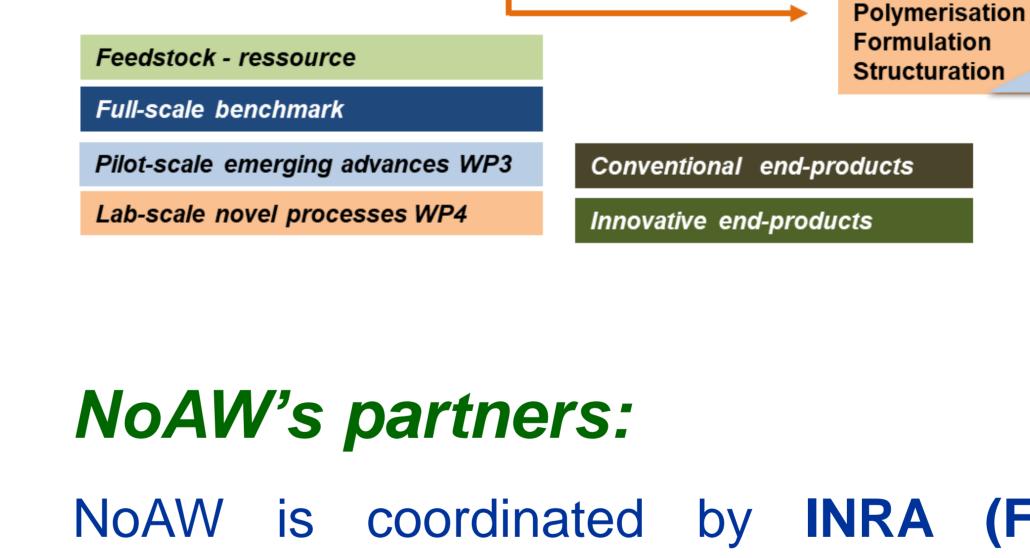


MTOE: million tons oil equivalent









Enzymatic, physical &

chemical deconstruct°

NoAW is coordinated by INRA (France) and the consortium involves 32 partners from universities, public research organizations and other institutions from a dozen countries (16 academics + 16 privates or associations).

Anters

**RISE (Sweden) DTU (Denmark)** AAU (Denmark)

**BioVantage (Danemark)** AGRIPORT (The Netherlands) ECOZETP (Germany) 15 IBBK (Germany) **VERMICON** (Germany) SCHIESSL (Germany) SOFIES (Switzerland) **IFV (France)** INOSUD (France) **APESA (France)** IT (France) **INNOVEN** (Italy) **CONFAGRICOLTURA (Italy)** IBET (Portugal) VA (Serbia) TIANAN (China)

Building blocks

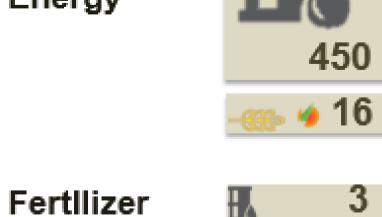
Lignocell fillers

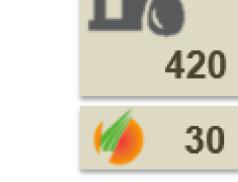
Composites Mat.

**Others chemicals** 

**Bio-polymers** 

#### Energy





Vs.

Agro-waste

Food

H

Oil

3

Plastics



Chemicals





20

60

20

6

**DLO-FBR (The Netherlands)** FRAUNHOFER (Germany) **INRA (France, Coordinator)** UM (France) UNIROMA (Italy) UNIBO (Italy)

**CBHU (Hungary)** 

SEE (Hong Kong)

SYSU (China)

IAPPST (China)

IAUS (Serbia) **NTUA (Greece)** ITRI (Taïwan)

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