

# SETIME Laboratory Project: RenewValue Organizes Workshop

Valorisation of lignocellulosic biomass waste: Case of date palm

On December 28, 2022

At the Faculty of Science Kenitra

#### Presentation of the RenewValue project

In the MENA region, populations in arid and semi-arid areas, often located in former oases, face serious environmental and socioeconomic problems related mainly to population growth. These communities are generally dependent on centralized energy production and do not benefit from any added value from largescale solar power plants in Morocco and Tunisia.

The overall objective of the proposed project was to systematically address the energy demand and potential of small communities in these inland and arid areas of Morocco and Tunisia. The goal is also to transfer the results of this project to other similar communities in the MENA region. In this project, sustainable and transferable energy concepts will be modelled and simulated for the case of the two selected regions in the two countries.



#### Preamble

Currently, agriculture in the Saharan regions is confronted with two opposing ideas: the need to preserve a production system that has resisted for centuries but is now subject to some of the most harmful socio-cultural, economic and ecological constraints, and the duty to advance a new, so-called "modern" agriculture, which should, in the near future, ensure the revival of the agricultural sector in these regions. Certainly, the wastes of the date palm are generally thrown towards the dumps or zones of the forest or there is risk of fires what causes environmental problems.

However, national and international economic changes, socio-cultural changes and ecological disturbances are leading to changes in farm management and agricultural practices. Currently, a strategic vision is emerging that is intended to be participatory and that offers different functions to the rural space.

### <u>Theme</u>

The objective of this workshop is to exchange ideas on the energy recovery of lignocellulosic biomass, in particular the waste of date palm in Morocco by the various methods of recovery, namely:

Aerobic treatment: composting;

- Energy recovery: thermochemical and biochemical conversion

Food valorisation: cattle feeding.



## **Honorary President**

Prof. Mohammed Ebn Touhami; Dean of Faculty of Sciences Kénitra

## Workshop Coordinator

Pr. Hassan El Bari (FSK, UIT)

# Workshop Secretariat

Dr. Nabila Lahboubi (FSK, UIT) Mme. Sanae Habchi (FSK, UIT)

## **Organizing Committee**

Pr. Hassan El Bari (FSK, UIT) Pr. Mohammed Aggour (FSK, UIT) Pr. Mohammed Igouzal (FSK, UIT) Pr. Lmokhtar Ikharrazne (FSK, UIT) Dr. Nabila Lahboubi (FSK, UIT) Dr. Fadoua Karouach (ASARI-UM6P) Mme. Sanae Habchi (FSK, UIT) M. Omar Kerrou (FSK, UIT)

# **Participation**

This workshop is dedicated to PhD students, researchers and professors. Participants are requested to register through the following link: https://docs.google.com/forms/d/e/1FAIpQLSemI2IJ8Y6 WoZ-grXrP-aeV\_Q5TcBdCi3Ifrptf05Gvn-2gSw/viewform?usp=sf\_link Deadline Is 24 December 2022 **Contact** 

Sanae Habchi, UIT Mail: <u>renewvalueworkshop2022@gmail.com</u>

Proc	aram:

<u>Program:</u>		
9:00 - 9:30	Opening	
9:30 - 10:00	Opening Speech	
	Dean of the Faculty of Sciences	
	Moroccan coordinator of the project	
Theme I - Valorisation of date palm waste		
10:00 - 10:20	Problem of the waste of the date palm,	
	Animated by Prof. Hassan El Bari	
10:20 - 10:40	Food and cosmetics valorisation of date	
	seeds	
10:40 - 11:00	Valorisation of date palm waste by	
	biochemical conversion-state of the art,	
	animated by Dr. Nabila Lahboubi	
11:00 – 11:30	Discussion	
11:30 - 12:00	Coffee break	
Theme II - Thermochemical valorisation of lignocellulosic waste		
12:00 - 12:20	The waste of the date palm and its ways of	
	energy recovery, animated by Dr. Fadoua	
	Karouach	
12:20 - 12:40	Energetic potential of date palm waste,	
	Animated by Omar Kerrou	
12:40 - 13:00	Biochar production from date palm waste:	
	process and applications, Animated by	
	Sanae Habchi	
13:00 - 13:20	Hydrothermal carbonization of	
	lignocellulosic biomass and its applications,	
	Animated by Prof. Mohammed Asbik	
13:20 - 13:40	Valorisation of Moroccan Olive Cake in	
	small scale burner through Stirling engine,	
	Animated by Prof. Nadia Rassai	

13:40 - 14:00	Discussion
14:00 14:30	Closing and recommendation
14:30	Lunch





