



## CEA Green Lab

The CEA Green Lab initiative is located in the Green Belt of Vitoria-Gasteiz city as a space of researching and generating innovative ideas for the improvement of the environmental and territorial development of Vitoria-Gasteiz. Between its objectives is the organization of training and information activities in areas of sustainable development, such as the summer course that is presented. In 2017, Has initiated a scholarship program that incorporates young researchers in various fields of Interest for the city of Vitoria-Gasteiz as is the protection and restoration of the soil.



## PhytoSUDOE project

The European cooperation project PhytoSUDOE (2016-2018) has co-funded this course within its activities of information. Its objective is to advance in the management and restoration of degraded spaces through new techniques of phytoremediation. [www.phytosudoe.eu](http://www.phytosudoe.eu)



### Manager

**Juan Vilela Lozano**

Coordinator of CEA Green Lab City council of Vitoria-Gasteiz.

Forestry Engineer by the UPM and Master in Landscape Architecture by the SUNY-ESF at Syracuse (USA) works on restoration of degraded soils.

Enrollment: [www.uik.eus](http://www.uik.eus)

Until 31-05-2017      Until 13-07-2017

General	60,00 €	70,00 €	
Exemption from enrollment		20,00 €	20,00 €

## More information

### UDA IKASTAROAK    CURSOS DE VERANO    SUMMER COURSES

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## Speakers

**Andrew Cundy**  
(Universidad de Southampton )

**Michel Chalot**  
(Université de Franche-Comté )

**Maria Rosa Mosquera**  
(Universidad de Santiago de Compostela )

**Tom Kuppens**  
(Hasselt University )

**Aser García**  
(NEIKER )

**Rocío Millán Gómez**  
(CIEMAT )

**Iñaki Susaeta**  
(Ihobe )

**Amaya Arteche**  
(TECNALIA )

**Natxo Irigoyen**  
(Universidad Pública de Navarra )



# New trends in restoration of degraded soils: energy crops and phytomanagement in a Circular Economy model.

July 13 – July 14



Code M4-17

Type of activity: Professional conference

Cycle: Science and technology, Energy and Environment

Location: Casa de la Dehesa de Olárizu (Vitoria-Gasteiz)

Languages: Day 13 – English / Spanish(simultaneous translation)

Day 14 – Spanish

Academic validity: 20 hours

## Description

In the restoration of degraded soils, phytoremediation techniques that combine different crops are increasingly being used. Forest plantations to obtain biomass or wood are being alternated with energy crops (biodiesel) or green fertilizers, which reduce the consumption of petroleum derived products. The tendency is to promote the phytomanagement of these spaces to obtain products with economic value while maximizing the ecosystem benefits of the restoration process. This course aims to explore models of phytomanagement in degraded spaces from the point of view of circular economy. It will show experiences that seek carbon neutral cycles, either by deriving agroforestry products to a green economy (biomass, biodiesel, ...) or by recycling the by-products that are generated (plant remains, ashes, compost) in the restoration process itself or into other final products. The program will be divided during the first day into three thematic blocks: forest crops, agricultural crops and agroforestry systems in which, after offering a theoretical framework of general context, practical cases and international experiences of interest will be presented. The second day will cover possible uses of agroforest products or residues under a circular economy model.

### Objectives

This second edition of Restoration of Degraded Soils will offer a more global vision to the problem of soils and their remediation. In this way, it is intended to spread the concept of phytomanagement and bioeconomics; experiences of energy utilization (biomass, biofuel, etc.) of species used in phytoremediation will be known; and it will delve into the recirculation of materials and waste reduction within the concept of Circular Economy. In addition, models of economic regeneration for outskirts zones and the rural environment will be known and new economic alternatives for the primary sector will be investigated.

## Program

### July 13

**08:45 - 09:00** Reception of assistants.

**09:00 - 09:30** Institutional Opening.

**Iñaki Prusilla.** Councilor for Environment and President of CEA  
**Ivan Igartua.** Vice-Rector of the Alava Campus of the EHU / UPV  
**Luis Orive.** Director of CEA

**09:30 - 10:30** Keynote Speaker.

“Phytomanagement to restore degraded sites and achieve wider benefits – the GREENLAND project.”

**Andrew Cundy** (University of Southampton)

**10:30 - 11:30** Conference.

“Phytomanagement of metal-contaminated soils: production and valorization of woody biomasses”

**Michel Chalot** (Université de Bourgogne Franche-Comté)

**11:30 - 12:00** Coffee break.

**12:00 - 13:00** Conference.

“Sustainable management of agricultural resources. Indicators of sustainable forest management, zoning of the forest landscape, adapted forestry and new models of forestry within the framework of the Green and Circular Economy.”

**Maria Rosa Mosquera** (University of Santiago de Compostela)

**13:00 - 13:30** Summary and debate.

**Juan Vilela** (CEA)

**13:30 - 15:30** Lunch break.

**15:30 - 16:30** Keynote speaker.

“Introduction to societal technoeconomic assessment of phytoremediation. How to add value to phytoremediating crops and make phytoremediation profitable, both from a societal and an investor's perspective. A Belgian case study.”

**Tom Kuppens** (Haseelt University)

**16:30 - 17:30** Conference.

“Life Seed Capital Project. Use of rapeseed crops for biodiesel production and reduction of emissions.”

**Aser García** (NEIKER)

**17:30 - 18:30** Conference.

“Phytomanagement for site remediation related to bioeconomics. CIEMAT experience (MERCURIO, BIOXISOIL and INTENSE projects).”

**Rocío Millán** (CINEMAT)

**18:30 - 19:00** Summary and debate.

**Carlos Garbisu** (NEIKER)

### July 14

**08:45 - 09:00** Opening.

**09:00 - 10:00** Keynote speaker.

“Circular Economy and the strategy for the Basque Country”  
**Iñaki Susaeta** (IHOBE)

**10:00 - 11:00** Conference.

“Green biorefinery based on a concept of Circular Economy”  
**Amaya Arteché** (TECNALIA)

**11:00 - 11:30** Coffee break.

**11:30 - 12:30** Conference.

“Closer experiences in the use of organic waste and Circular Economy. Practical cases”

**Natxo Irigoyen** (Universidad Pública de Navarra)

**12:30 - 13:30** Summary and final debate. End of conferences.

**Antonio Hernández** (UPV-EHU)

**13:30 - 15:30** Lunch break.

**15:30 - 17:30** Field trip.

Visits to pilot projects:  
PhytoSUDOE plots and experimental sites in Jundiz.

Bus output: Parque de La Florida  
(C/ Monseñor Cadena y Eleta)

### Languages

**Thursday 13:** English/Spanish with simultaneous translation.

**Friday 14:** Spanish.