

# GREECO

## Territorial Potentials for a Greener Economy

Applied Research 2013/1/20

Final Report | Version 28/02/2014

Scientific Report

Vol. 2.0. Reading Guide



This report presents the **final** results of an Applied Research Project conducted within the framework of the ESPON 2013 Programme, partly financed by the European Regional Development Fund.

The partnership behind the ESPON Programme consists of the EU Commission and the Member States of the EU27, plus Iceland, Liechtenstein, Norway and Switzerland. Each partner is represented in the ESPON Monitoring Committee.

This report does not necessarily reflect the opinion of the members of the Monitoring Committee.

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The web site provides the possibility to download and examine the most recent documents produced by finalised and ongoing ESPON projects.

This basic report exists only in an electronic version.

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## List of authors

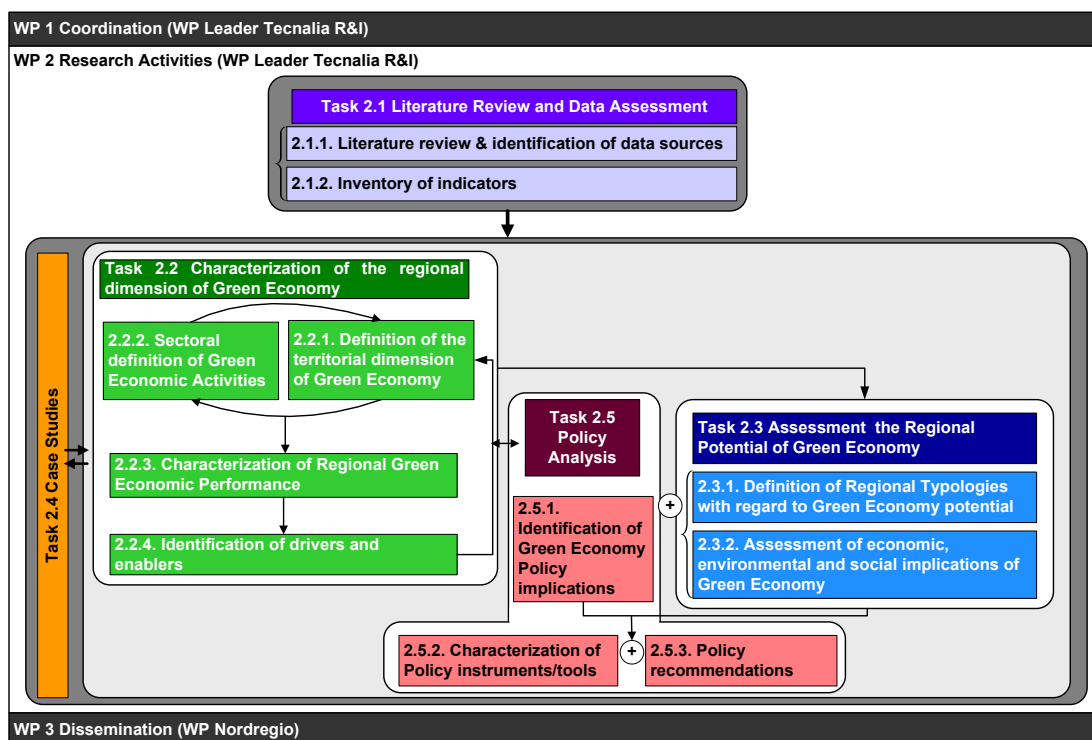
### **Tecnalia (Spain)**

Carlos Tapia

# 1. Reading guide

## 1.1. Project structure

GREECO project has been implemented through a number of tasks that contributed to produce the territorial evidence needed to characterise the transitioning to greener regional economies across the ESPON space.



**Figure 1 GREECO structure of tasks, including key role of TPG components**

Task 2.1 played a major role in shaping an operative definition of “green economy” within the project (see Vol. 2.1). This conceptualisation was done against a research framework characterised by severe data scarcity that prevented GREECO to deliver a detailed product-based depiction of the green economy in terms of Gross Value Added and job creation.

Data shortages were overcome by implementing a highly innovative (and more ambitious) approach based on a systemic and transitioning characterisation of the green economy. This led to the production of a new array of indicators illustrating the process of transitioning to a greener economy at the regional level

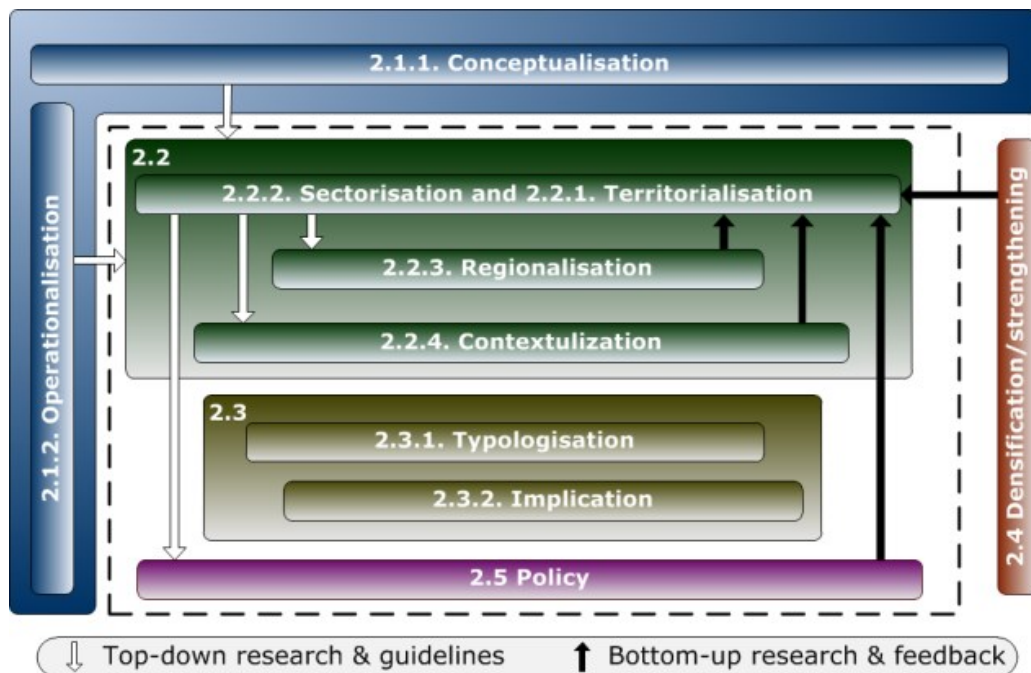
(see Vols. 2.2 and 2.3).

Basing on the conceptualisation and evidence generated within Task 2.1, Task 2.2 portrayed a number of relevant dimensions of the green economy, namely:

- Task 2.2.1 described what “greening of the economy” means from a territorial perspective (refer to Vol. 2.4).
- Task 2.2.2 performed a sectoral characterisation of the green economy (see Vol. 3.1) relying on the sector analyses performed in GREECO (included in Vols. 3.2 to 3.11).
- Task 2.2.3 delivered a top-down assessment of green economic performance (see Vol. 2.5).
- Task 2.2.4 identified the barriers, drivers and enabling conditions for a greener growth at the regional and local levels (See Vol. 2.6, annexes to Volumes 3.2 to 3.11, and Vols. 4.2 to 4.11).

These top-down assessments were validated and complemented by a bottom-up exploration of the economic greening processes within a number of case study areas (see Vols. 4.1 to 4.11).

All the evidence collected on previous tasks were combined to illustrate the regional potentials for a greener economy in a very schematic fashion (see Vol. 2.6), and eventually led to the policy recommendations emerged from the territorial evidence collected in GREECO (see Vol. 5).



**Figure 2 GREECO research flow**

## 1.2. Contents

Mirroring the task structure introduced above, the **Final Report** of **GREECO** project is delivered together with a number of additional volumes that shed light on the different processes and elements involved in the greening transitions investigated in GREECO project:

**Volume 2 – Scientific Report** includes several research materials that underpin the conceptual and analytical framework of the project. These have been arranged in different sub-Volumes, namely:

**Volume 2.1. The green economy – making the principles of sustainable development operational.** This document has been elaborated by Prof. Anders Chr. Hansen, from Roskilde University. The report delivers a fully-fledged description of the different elements that jointly can shape the transitions to a greener economy.

**Volume 2.2. GREECO datasets at NUTS2 and NUTS3 level.** A comprehensive dataset report including accurate descriptions for more than 30 indicators used in the characterisation of the different dimensions of the green economy, comprising regional economic aggregates, and specific indicators on decarbonisation, ecosystem services, water and waste management, general innovation potential, as well as social and regional inclusion. This report has been prepared by a Roskilde University team led by Prof. Anders Chr. Hansen.

**Volume 2.3. Bioenergy potentials from residues from Agriculture and Forestry** An assessment report of bioenergy potentials prepared by a research team from Eberswalde University for Sustainable Development led by Prof. Dr. Hans-Peter Piorr. This report, presents the very first highly innovative attempt to quantify regional potentials for bioenergy production from Agriculture and Forestry residues.

**Volume 2.4. The territorial dimension of the green economy.** This report, prepared by Rasmus Ole Rasmussen from Nordregio attempts to shed light on the territorial dimension of the green economy. The report elaborates on the territorial dimensions that drive, enable or hinder the development of the green economy in European regions (territorial factors), as well as on the new or existing territorial phenomena that are accentuated in one way or another by pursuing the green economy (territorial outcomes).

**Volume 2.5. Assessing regional green economic performance** by Klaus Spiekermann and Mike Dokter from Spiekermann & Wegener, Urban and Regional Research (S&W). This report aims to shed light on how the regions in Europe are doing from a green economic perspective, with the aim of providing a quantitative profile of green economy at the

regional level in Europe

**Volume 2.6 Exploring territorial potentials for a greener economy** by Carlos Tapia (Tecnalia R&I). Similarly to previous report, the analysis of regional potentials aims to provide a quantitative characterisation of regional green economic performance. To do so, the assessment relies on the presence of key driving forces and enabling conditions within specific regions and territories. The report introduces some conceptual elements for analysis and proposes specific indicators for each group of green economy drivers as building blocks to build a regional typology of green economic potentials.

**Volume 3 – Sector Reports** provides an overview of the different sectors assessed in GREECO project. For the sake of readability, Volume 3 has been sub-divided in a series of sector reports that are delivered as stand-alone sub-Volumes:

**Volume 3.1. Sector Synthesis** provides an overview of the different sectors assessed in GREECO project. The synthesis has been produced by Nordregio (Sweden)

**Volume 3.2. Bio-economy - Subsector forestry and agriculture** by Nordregio (Sweden)

**Volume 3.3. Bio-economy - Subsector fisheries and aquiculture** by Nordregio (Sweden)

**Volume 3.4. Green building and construction** by Nordregio (Sweden)

**Volume 3.5. Green research and eco-innovation** by TECNALIA Research & Innovation (Spain)

**Volume 3.6. Manufacturing** by TECNALIA Research & Innovation (Spain)

**Volume 3.7. Renewable energy** by Nordregio (Sweden)

**Volume 3.8. Tourism** by Nordregio (Sweden)

**Volume 3.9. Transport** by Spiekermann & Wegener - Urban and Regional Research (S&W) (Germany)

**Volume 3.10. Waste management** by Regional Environmental Center - REC (Hungary):

**Volume 3.11. Water management** by Regional Environmental Center - REC (Hungary):

**Volume 4 – Case Studies** provides several examples of how the green economy

is starting to shape regional economies at different scales. In order to allow for a simpler access to information, Volume 4 has been distributed as stand-alone sub-Volumes:

**Volume 4.1. Synthesis of Case Studies** provides an overview of the different case studies assessed in GREECO project. This Volume elaborates on a number of examples from case studies, including impacts on the green economy in terms of value added and job creation, the strategic approach of regions towards the creation of green growth agendas, as well as the key drivers and enabling conditions found within all such examples. The synthesis has been produced by Regional Environmental Center - REC (Hungary)

**Volume 4.2. Austria – Burgenland**, by Spiekermann & Wegener - Urban and Regional Research (S&W) (Germany)

**Volume 4.3. Denmark - Sjælland**, by Roskilde University (Denmark)

Volume 4.4. Estonia - Lõuna-Eesti, by Nordregio (Sweden)

**Volume 4.5. Germany - Ruhr Area**, by Spiekermann & Wegener - Urban and Regional Research (S&W) (Germany)

**Volume 4.6. Hungary - South Transdanubia (Dél-Dunántúl)**, by Regional Environmental Center - REC (Hungary):

**Volume 4.7. Italy - Puglia**, by TECNALIA Research & Innovation (Spain)

**Volume 4.8. Malta**, by Regional Environmental Center - REC (Hungary):

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**Volume 4.10. Sweden – Jämtland**, by Nordregio (Sweden)

**Volume 4.11. United Kingdom - Cornwall and Isles of Scilly**, by Roskilde University (Denmark)

**Volume 5 – Policy options and recommendations** draws on the lessons learnt in the project. It systematises all this information in the form of policy recommendations delivered, as far as possible, by sector, policy goal, key policy areas, scale of implementation, types of territories, key policy instruments and target policy agent/body/stakeholder and other actors considered relevant for their successful implementation.





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