



Horizon 2020 Societal challenge 5
Climate action, environment, resource
Efficiency and raw materials

D7.2: WEBSITE

LEAD AUTHOR:

Maria Berglund

OTHER AUTHORS:

Guido Schmidt

Linda Romanovska

PROJECT	Sustainable Integrated Management FOR the NEXUS of water-land-food-energy-climate for a resource-efficient Europe (SIM4NEXUS)
PROJECT NUMBER	689150
TYPE OF FUNDING	RIA
DELIVERABLE	D.7.2 Project Website
WP NAME/WP NUMBER	WP Dissemination and Communication / WP 7
TASK	Task 7.2
VERSION	1
DISSEMINATION LEVEL	Public
DATE	27/10/2016 (Date of this version) – 31/10/2016 (Due date)
LEAD BENEFICIARY	FT
RESPONSIBLE AUTHOR	Maria Berglund
ESTIMATED WORK EFFORT	1.1 person-months
AUTHOR(S)	Maria Berglund (FT), Guido Schmidt (FT), Linda Romanovska (FT)
ESTIMATED WORK EFFORT FOR EACH CONTRIBUTOR	0.5; 0.5 and 0.1 person-months
INTERNAL REVIEWER	Guido Schmidt (WP Leader)

DOCUMENT HISTORY

VERSION	INITIALS/NAME	DATE	COMMENTS-DESCRIPTION OF ACTIONS
		31.10.2016	THE CURRENT VERSION OF THE WEBSITE IS NOT VERIFIED BY THE PCT. IT WILL BE VERIFIED BY NOVEMBER 15. THE CONSORTIUM MAY REQUEST FOR RESUBMISSION.

Table of Contents

Executive summary..... 4

1 Introduction..... 5

2 Technical characteristics..... 5

Executive summary

The project website has been prepared and is operational since M3. Updates will be realised on a regular basis. The website received a number of comments and suggestions from the partners during a consultation phase; these were incorporated into the website in M5.

Changes with respect to the DoA

None

Dissemination and uptake

The website targets the general public, stakeholders, any interested individuals. Type: 'Other'.

Short Summary of results (<250 words)

A draft structure of the website was agreed with the Project Coordinator in M1 and M2. The website was developed by a sub-contractor and went online in M3. Detailed comments from the project-coordinator have been send on 16 August 2016; these comments were incorporated into the website.

Evidence of accomplishment

Web-link: www.sim4nexus.eu

Screen shots are provided in the report.

1 Introduction

The aim of the project's website is to create as a platform for external communication; complementary to the many communications actions foreseen on sector-specific platforms.

The website focuses on results and news on upcoming events of the project and does not aim to create a new platform for nexus information. Rather, it is a place to find out about the main outcomes of the different work packages.

2 Technical characteristics

2.1 Home Page

The home page of the website contains rotating sliders with the main communication messages of the project:

- ❖ SIM4NEXUS envisions the Nexus concept as an integral part of the transition towards a resource-efficient and low-carbon economy.
- ❖ SIM4NEXUS quantifies the water-energy-land-food and climate nexus for resource efficiency
- ❖ SIM4NEXUS for synergies, not for single policies on water, energy, land, food and climate
- ❖ SIM4NEXUS builds on actors' knowledge, complexity science and a serious game for more reliable decision-making
- ❖ SIM4NEXUS elucidates the links, trade-offs and synergies between water-food-energy-land under climate change
- ❖ SIM4NEXUS is a great opportunity to push sustainable innovation and create tomorrow's jobs and growth

The home page presents a short summary of the project and includes a figure showing the inter-linkages of the work. On the right-hand side, the project's twitter account shows live tweets from the project's account and any users tweeting about the project using #SIM4NEXUS.

The home page has 6 headings:

- Home
- About
- Partners
- News
- Outputs
- Contacts

Screenshots of the Page:



2.2 About

The About heading has two sub-headings:

- Project Overview
- Case Studies

2.2.1 Project Overview

The Project Overview page contains:

- General information about the project
- Flowcharts showing the links between the Work packages. The flowcharts are shown in small icons that enlarge when you click on them.
- Work packages shortly summarized. The WP summary slides open when you click on the title.

Screenshot of the Page:

Project overview

Water, land, food, energy, and climate are interconnected, comprising a coherent system (the "Nexus"), dominated by complexity and feedback. Putting pressure on one part of the Nexus can create pressures on the others. Management of the Nexus is critical to securing the efficient use of our scarce resources. Through the five nexus themes, **SIM4NEXUS** aims to predict **society-wide impacts of resource use and relevant policies on sectors** such as agriculture, water, biodiversity and ecosystem services through a model-based analysis.

SIM4NEXUS will achieve this through:

1. **Scientific basis.** To consist of (i) a **complexity science library** of integrated tools that use complexity science and Artificial Intelligence (AI) approaches. (ii) a **GeoPlatform** to integrate data and metadata sources on all themes for decision and policy-making. The foundation of these components will be seven established computer models, each integrating two or more nexus themes (see below for more detail). (iii) A **Knowledge Elicitation Engine (KEE)** to provide the link to the Serious Game interface.
2. **Serious Game (SG).** To create a user-friendly, cloud-based interface that will allow general experts to understand the Nexus themes, how they interact, and to test scenarios and policy choices, and to ultimately policymakers and policy decisions.
3. **Capability building and consultancy.** Reliable application of the Serious Game and underlying models will require expert guidance and management. Project experts will work with 'customers' to support in-depth and project-specific Nexus studies, to help guide policy choices and decision-making. **Other spin-off products** will be developed to maximise the potential of the SG and SIM4NEXUS results.

The Fig. 1 flowchart provides an overview of the interaction between the different outputs. Fig. 2 presents the schematic of the SIM4NEXUS system showing how different modules interact through different scales. Fig. 3 gives a schematic presentation of the SIM4NEXUS workflow of its 8 work packages.



Fig 1: Outputs



Fig 2: Interaction of Modules



Fig 3: Work Packages

Work Package Descriptions

Work Package 1: Understanding the NEXUS

This Work Package creates a scientific inventory on the nexus and advances the state-of-the-art in Nexus research. In this WP, we develop the Framework for the assessment of the Nexus to be used in the case studies, we identify suitable innovations/low carbon options to be implemented in the case studies, while Nexus Performance Indicators (NPIs) are used to assess how these innovations lead in Nexus-compliant practices and improve resource efficiency.

Work Package 2: Policy Analysis

Work Package 3: Thematic Models and Integration

Work Package 4: Serious Game

Work Package 5: Case Studies

Work Package 6: Business Plan

Work Package 7: Communication

Work Package 8: Project Management

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 689150 SIM4NEXUS.



SIM4NEXUS is a member of the ICT4water cluster and is leading the Water-Energy-Food Biodiversity Nexus WSSTP working group



2.2.2 Case Studies

The Case Studies page contains a general overview page summarizing the goals of the case studies, including a map of the case studies. Next to the map the individual case studies are listed with hyperlinks. Each case study heading is hyperlinked to a separate case study page that contains short information, its poster and contact information for the case study.

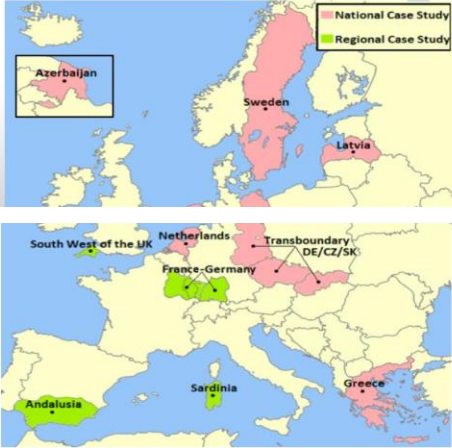
Screenshot of the Page:



Home ■ About ■ Partners ■ News ■ Outputs ■ Contacts ■

Case studies

12 case studies will be developed during the project. They are classified under four different categories/levels: regional, national, continental and global. The case studies will serve as test-beds for the models, the integration methodologies and the Serious Game. In all the case studies we want to study the Nexus trade-offs and the impact of different policies for the future. In all regional and national case studies we are planning to engage local stakeholders and decision makers (actors) for the development and testing of the strategies, the policies, and the Serious Game. These will be involved from the start of the project, with the help of local partners, who are members of the consortium.



- Regional Case studies**
 - Region of Andalusia, Spain
 - Island of Sardinia, Italy
 - Southwest UK, the counties of Devon and Cornwall
- National Case Studies**
 - The Netherlands
 - Sweden
- Transboundary Case Studies**
 - France-Germany
 - Eastern Germany, Czech Republic and Slovakia
- Continental and Global**
 - Europe
 - Global

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 689150 SIM4NEXUS.

SIM4NEXUS is a member of the [ict4water](#) cluster and is leading the [Water-Energy-Food Biodiversity Nexus WSSTP](#) working group.




Screenshot of an individual case study page (example):



Home ■ About ■ Partners ■ News ■ Outputs ■ Contacts ■

Europe

Lead Partners: WUR-LEI Radboud University

This case study addresses Europe as a whole, examining different strategies for the future like the biodiversity strategy and the WFD. We will investigate barriers of integrating policies in European legislation and focus on medium-term pathways for sustainable growth till 2050 and the interaction among different components of the Nexus. This case study will partially draw from the regional and national cases. Outcomes from thematic models that already represent Europe (e.g. MAGNET, CAPRI etc.) will be combined with methodologies of integration, with public domain data, through a Serious Game at European level, for demonstration, educational purposes (e.g. for University students). To account for trade-offs and indirect effects, the modelling capacity will also be applied to assess the effect of EU policies on other world regions.

SIM4NEXUS



H2020-RIA
GA 689150

CASE STUDY

Europe

TYPE: Continental



Facts and Figures

Fig1: Region of case study



Fig 2: CO2 emissions from IEA (2009)

Millions of tons of CO2 Europe, 2007

Source	Percentage
Coal	25%
Oil	47%
Gas	13%

Local stakeholders involved

The organizations involved either directly or as anticipated end users of the analysis include: various department of the European commission including DG Energy, Agriculture, Climate and environment, the European parliament, the water supply and sanitation technology platform (WssTP) and Copo-Cogeca (an organization representing farmers and their cooperatives).

End-user's scope



The focus for the end user will be on the policy drivers that determine which transition pathway to a low carbon economy is realized as well as the implications of each pathway on water use, water stress, and food security.

A particular emphasis will be on providing a (shadow) price for the non-market goods of water and greenhouse gas emissions such that policy makers can better assess the value of these resources for economic activity and the trade-offs inherent in policy to restrict or regulate their use.

The transition pathways developed in this case study would then help to inform the stakeholders in developing an integrated Europe wide energy and climate and agricultural policy as well provide a framework of possible future scenarios for national level decision makers in these policy arenas.

Relevant project partners

LEI-Wageningen University UR, the main SIM4NEXUS partner in this case study. LEI will contribute analysis from the MAGNET model, a general equilibrium model of the global economy with national scale resolution based on the GTAP model and database.

Cambridge Econometrics will contribute analysis from the E3ME model, a macro-econometric model with global coverage and national resolution with a focus on energy and emissions.

Technical University of Madrid will contribute analysis from the CAPRI model, a partial equilibrium model of the agricultural sector with a focus on the EU.

Radboud University will also contribute their expertise with the E3ME model.

Contacts

Jason Levin-Koopman jason.levin-koopman@wur.nl
 Hector Pollitt hp@camecon.com
 Maria Blanco maria.blanco@ugm.es
 Jean-Francois Mensure J.Mensure@science.rua.nl
 Floor Brauwer floor.brauwer@wur.nl

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 689150 SIM4NEXUS.

SIM4NEXUS is a member of the ICT4water cluster and is leading the Water-Energy-Food Biodiversity Nexus WSSTP working group.

2.3 Partners

The partners page lists the Consortium team members along with their logos. When you click on an Institute's name, a box slides down displaying a description of the Partner.

Screenshot of the Page:

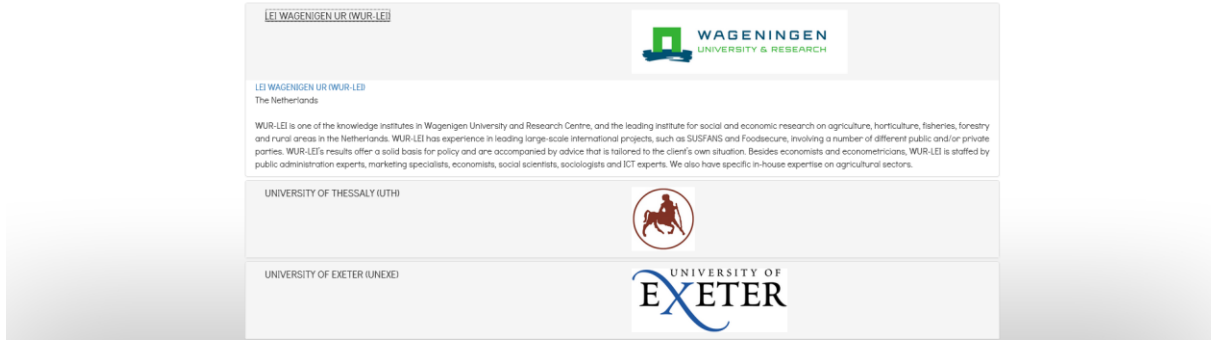
Home ■ About ■ **Partners ■** News ■ Outputs ■ Contacts ■

Partners

- LEI WAGENINGEN UR (IWUR-LEI)
- UNIVERSITY OF THESSALY (UTH)
- UNIVERSITY OF EXETER (UNEXE)
- UNESCO-IHE (IHE)

Example of the Page with a partner summary open:

Partners

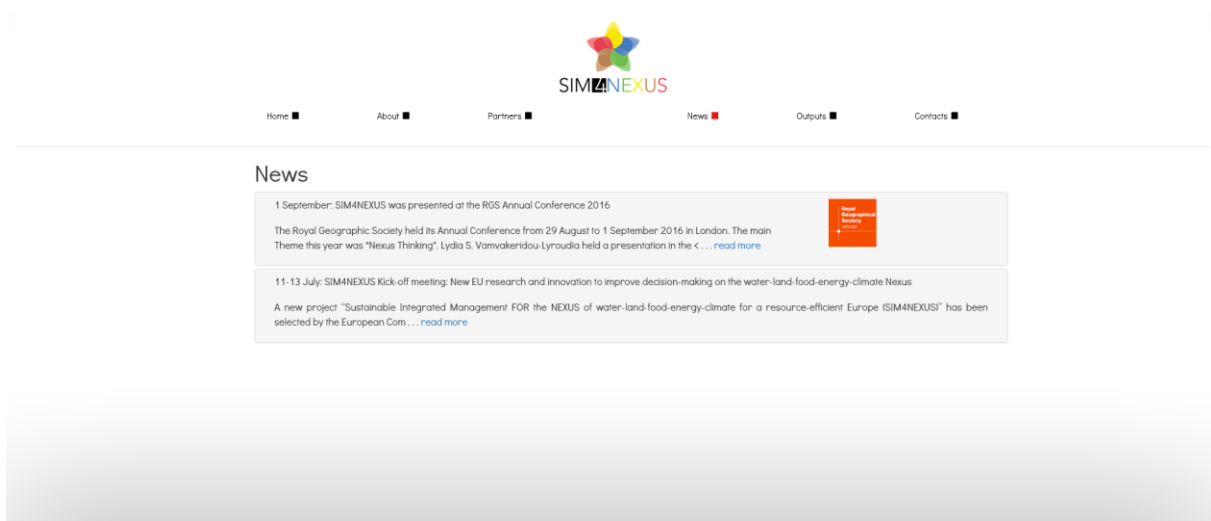


2.4 News

The News pages shows the individual news items. Short summaries (1-2 sentences) acting as teaser text are shown directly on the page; where possible the news stories include pictures or logos of the event.

The News page will be updated regularly throughout the project as Partners attend new events, deliverables are published, etc.

Screenshot of the Page:



2.5 Outputs

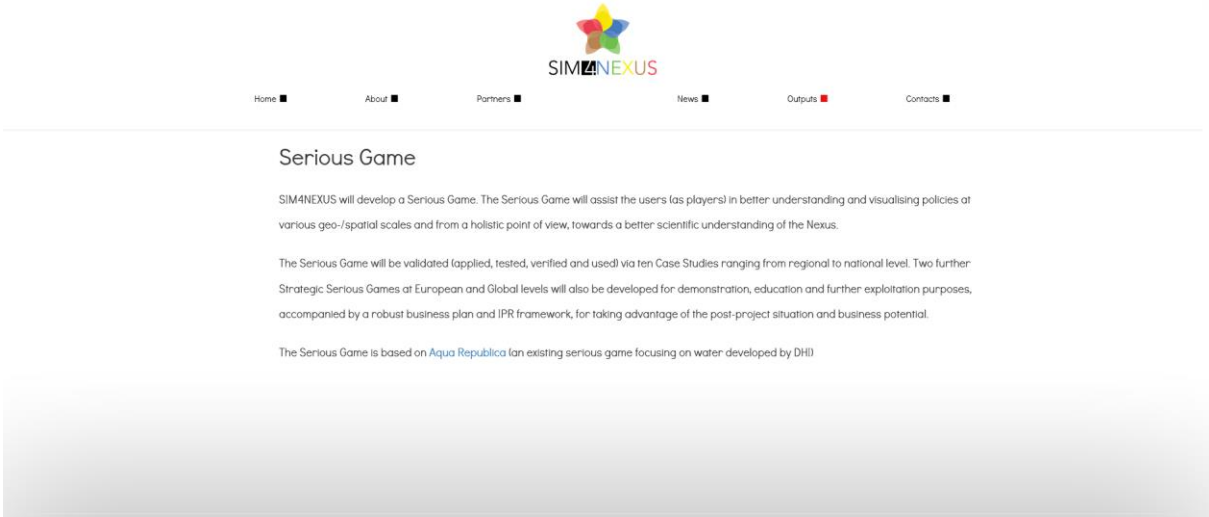
The header has three sub-headings:

- Serious Game
- Deliverables
- Publications

2.5.1 Serious Game

At the moment, the page contains a brief summary of the serious game and link to the Aqua Republica Game. The WP leader has been contacted to develop a more detailed summary of the Serious Game. As the project progresses, screen shots of the Game will be added so website visitors can get a better understanding of what the Game is about.

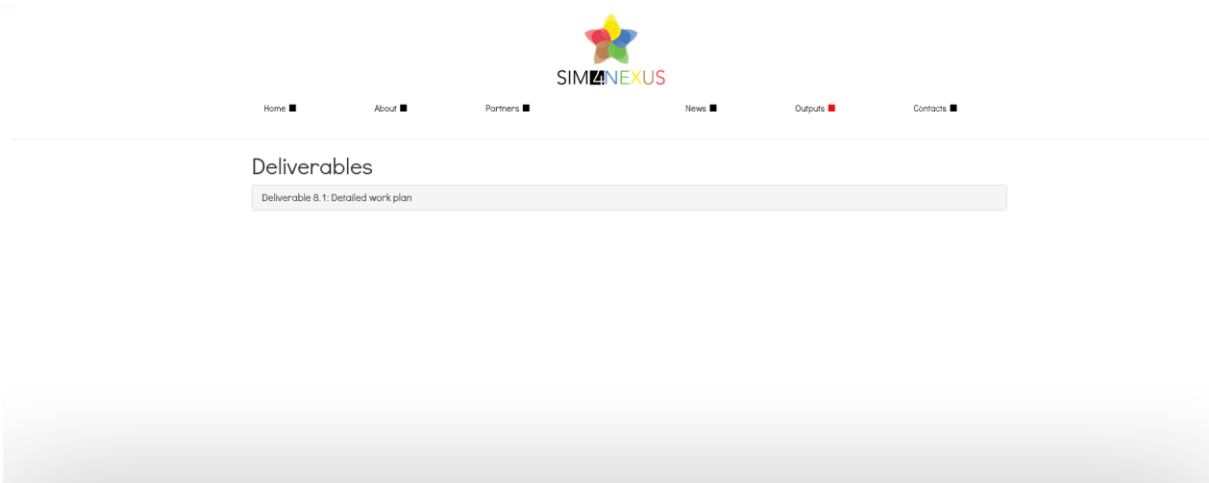
Screenshot of the Page:



2.5.2 Deliverables

This sub-page will provide short summaries and hyperlinks to public deliverables as they become available.

Screenshot of the Page:



2.5.3 Publications

This sub-page will provide short summaries and hyperlinks to publications as they become available. At the moment, no publications have been published.

Screenshot of the Page:



2.6 Contact

This page provides the contact information for the Project Co-ordination.

