



# OPENING ADDRESS: ECODISTR-ICT IN A NUTSHELL

Han Vandevyvere, 17.11.2015




ECODISTR-ICT project - Funded by the 7th Framework Programme of the European Union - Grant Agreement #609154 - 1



## ECODISTR-ICT (INTEGRATED DECISION SUPPORT TOOL FOR RETROFIT AND RENEWAL TOWARDS SUSTAINABLE DISTRICTS)

FP7 EeB.ENV.2013.6.3-4 ENERGY EFFICIENT RETROFITTING AND RENEWAL OF  
EXISTING BUILDINGS FOR SUSTAINABLE URBAN DISTRICTS / COLLABORATIVE  
PROJECT / 2013 - 2016



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## ABSTRACT



The ECODISTR-ICT project aims at developing an **integrated decision support tool** that facilitates decision making on the **retrofitting and renewal of existing districts and its composing buildings**. It connects the main **decision makers** in urban district transformation programs, acting from different perspectives, with different time scales, to reach a **coordinated approach** that joins building retrofitting with district renovation. This coordinated approach adds the benefits of the economies of scale on a district level and allows for **optimization and prioritization** of decision-making. The tool provides trustworthy insights on retrofitting and renewal projects, the associated **costs and benefits during the life cycle** of the buildings and the impacts of these on **resource efficiency, social aspects, indoor and outdoor quality of buildings and districts, and environmental concerns**.

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## KEY OBJECTIVE



The key objective of ECODISTR-ICT is to support the sustainable renewal of urban districts.

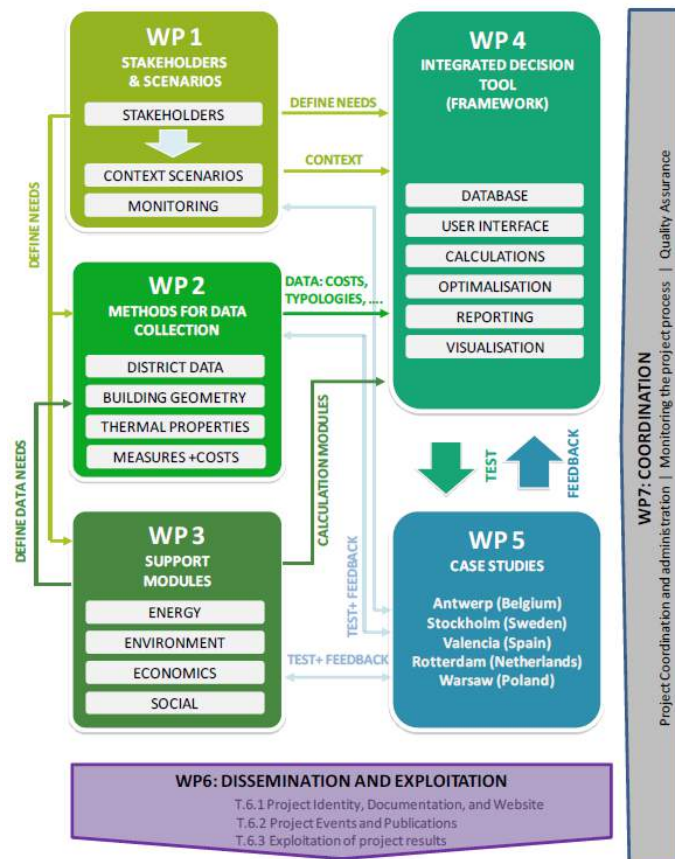
To achieve this goal, the ECODISTR-ICT team develops a modular open source software platform to support the decision-making process of all stakeholders involved in district renovation.

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Participant no	Legal name	Main activity	Country
<b>1 VITO (coordinator)</b>	Vlaamse Instelling voor Technologisch Onderzoek	Research	Belgium
<b>2 SP</b>	SP Sveriges Tekniska Forskningsinstitut	Research	Sweden
<b>3 CSTB</b>	Centre Scientifique et Technique du Batiment	Building research	France
<b>4 TNO</b>	Nederlandse organisatie voor Toegepast Natuurwetenschappelijk Onderzoek - TNO	Research	The Netherlands
<b>5 VABI</b>	VABI Software	Software developpers	The Netherlands
<b>6 Strusoft</b>	Structural Design Software in Europe	Software developpers	Sweden
<b>7 White Architects</b>	White Arkitekter Aktiebolag	Architects / city planners	Sweden
<b>8 Sigma Orionis</b>	Sigma Orionis	Communication office	France
<b>9 Omgeving</b>	Omgeving, multiprofessionele ontwerpers- en architectenvennootschap	Architects / city planners	Belgium
<b>10 Bipolaire</b>	Bipolaire Arquitectos SLP	Architects / city planners	Spain
<b>11 ARUP</b>	Arup bv	Architects / city planners	The Netherlands

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## WORK APPROACH



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# CASE STUDIES



## CASE STUDIES: CAMPANAR, VALENCIA



Workshop in May 2014 with the residents and Campanar Residents Association. Problem Analysis and Ambitions.

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## CASE STUDIES: CAMPANAR, VALENCIA



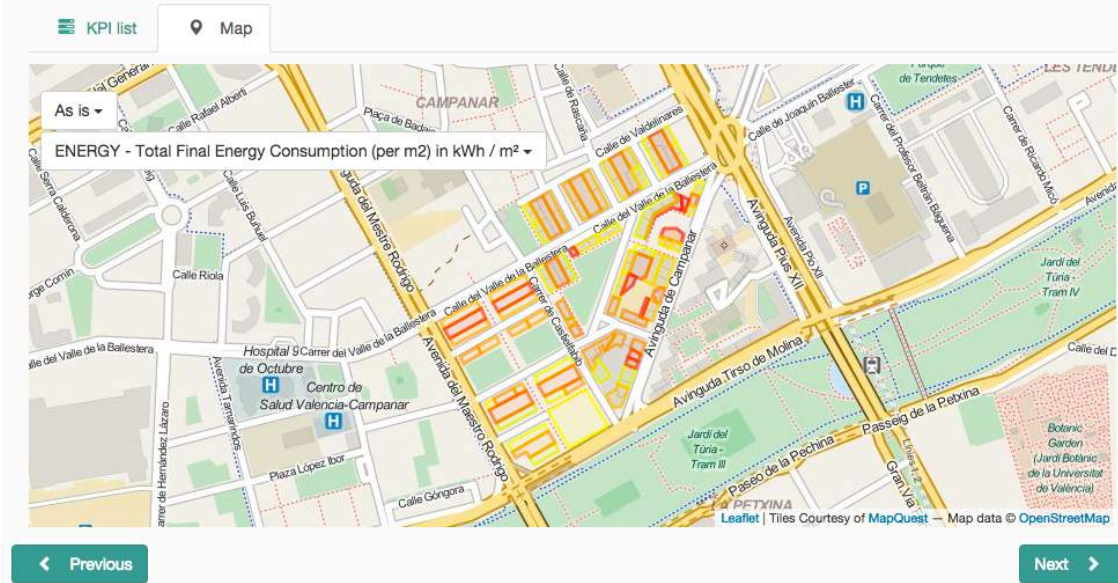
Example of assessment of results

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# CASE STUDIES: CAMPANAR, VALENCIA

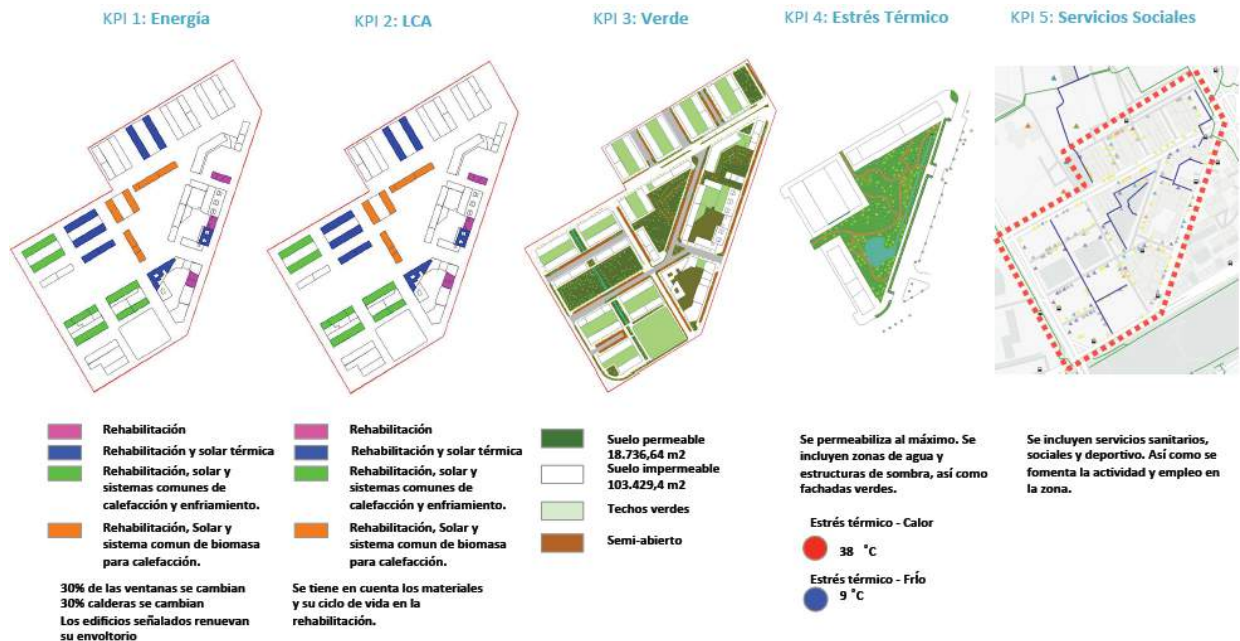
## As is situation



Map showing energy calculation results

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# CASE STUDIES: CAMPANAR, VALENCIA



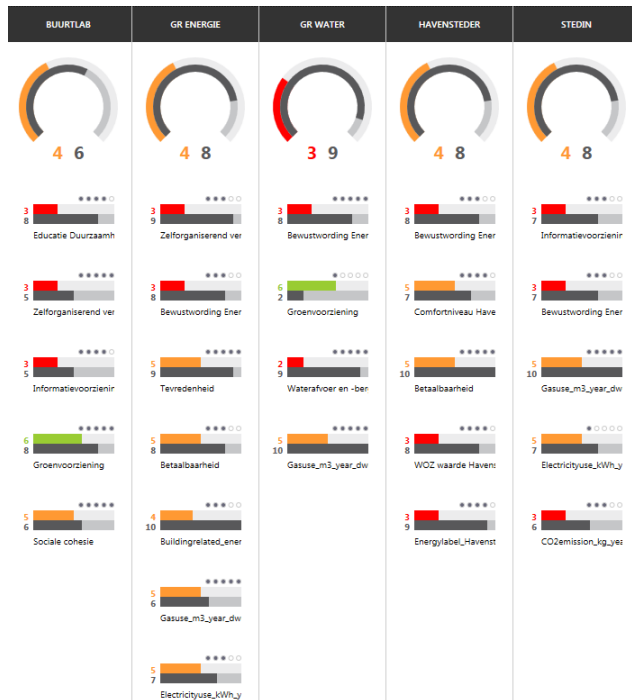
Maps of Campanar: Optimistic scenario for the different KPIs

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# CASE STUDIES: RUBROEK, ROTTERDAM



Variant: As is to be



## MCMSMV

MULTI CRITERIA:STAKEHOLDER:VARIANT

Overview of the as-is situation, compared to the to-be situation in the MCMSMV module. The selected KPI values are represented per stakeholder. The dots refer to the weight the stakeholders gave, the colour represents the score (red is low, dark green is high).

# CASE STUDIES: RUBROEK, ROTTERDAM



Stakeholder: Havensteder to be



Overview of the alternatives for the KPIs of the housing corporation. The as-is and to-be scores are on the left. The dark grey bars denote the ambition level.

## User/stakeholder feedback

e.g.

The **IDSS** is a decision-support system and should only be used where it can have added value. That implies that some preparatory work needs to be done getting the decision-making process going: analysing the problem(s), sharing ambitions and discussing alternatives. The process steps developed can also be **helpful in bringing some structure in the sometimes chaotic process of decision-making** in a context with many stakeholders and diverging interests, which may be of use in the early steps without the IDSS

The **MCMSMV module** displays either, for each alternative the scores of the KPIs for all stakeholders, or for each stakeholder the scores of the KPIs for all alternatives.

At the moment, there is no overview graph including the weighted total scores for all stakeholders on all alternatives. This could be added as an **overview graph** in the MCMSMV module, giving one overview of KPI scores for all alternatives and all stakeholders, to support the discussion.

Tuesday, Novembre 17 <sup>th</sup> - Public event	
08:30 - 09:00	Registration - Reception (floor 4)
09:00 - 10:30	Plenary session - 6an room
<i>Chair</i>	<i>Carl-Magnus Capener - SP, Sweden</i>
09:10 - 09:20	<b>Welcome adress</b> <i>Viktoria Walldin - White, Sweden</i>
09:20 - 09:30	<b>Opening adress</b> <i>Han Vandevyvere - VITO, Belgium</i>
09:30 - 09:50	<b>Development of Urban Ecosystem Services in Norra Djurgårdsstaden, Stockholm</b> <i>Christina Wikberger - City of Stockholm, Sweden</i>
09:50 - 10:10	<b>Urban scale energy systems</b> <i>Ivo Martinac - Royal Institute of technology, Stockholm</i>
10:10 - 10:30	<b>Urban renewal and development of Farsta, Stockholm</b> <i>Anna-Stina Bokander - City of Stockholm, Sweden</i>
10:30 - 11:00	COFFEE BREAK – 6an room
11:00 - 12:30	Live demonstration of the ECODISTR-ICT decision-support tool - 6an room
<i>Chair</i>	<i>Blanca Pedrola - Bipolaire, Spain</i>
12:30 - 13:30	LUNCH – 6an room