

LIVING LAB



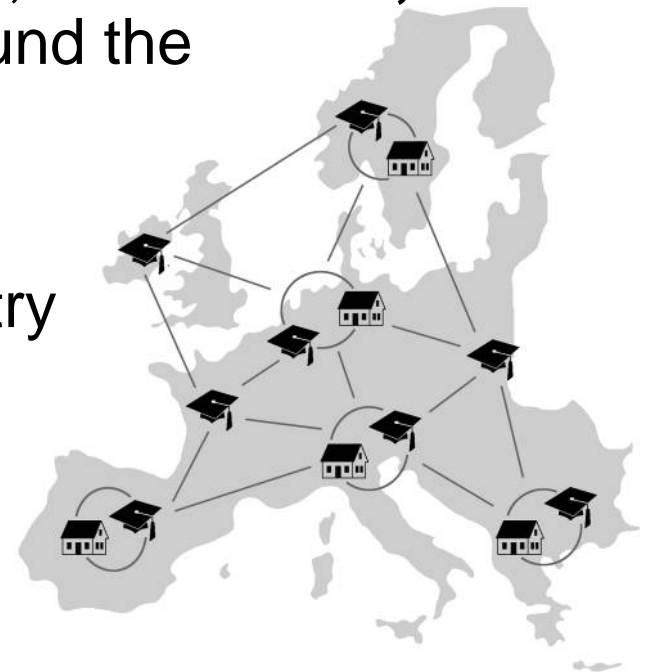
Introduction

LIVING
LAB

What is LIVING LAB?

LIVING LAB will be a European Research Infrastructure that researches **human interaction** with, and stimulates the **adoption** of, **sustainable, smart and healthy** innovations around the **home**. LIVING LAB aims to:

- Strongly **improve the uptake of innovations** developed by industry
- **Foster key societal objectives:** competitiveness, sustainability and quality of life
- **Advance the field of user interaction research** to meet these objectives



Need for a user-centred approach

- **New products and innovations often fail in the market** due to technology push and lack of understanding of their adoption by end-users
- In addition many sustainable **innovations do not achieve the foreseen sustainable impact** when actually used
 - A result of rebound effects and mismatch between societal and individual benefits
- A **user centred approach** is needed to better predict commercial value and sustainable impact

Overcoming barriers to user involvement

Companies recognise the **need for user insight** in product development and are adapting their product development approaches, however:

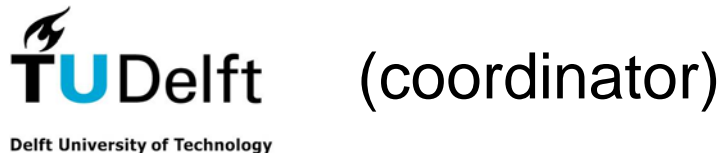
- Especially more industry-oriented companies are **lacking expertise and facilities** necessary to execute such research
- In addition current **research methods are limited in their effectiveness** due to undifferentiated insights, incomplete information

LIVING LAB aims to provide the necessary expertise, facilities and research methods



Current status

- **Design Study** (2008-2009) for developing the LIVING LAB infrastructure, co-funded by the European Commission
- **Partners** currently involved:



Vision: a world-leading knowledge hub

LIVING LAB will be a world-leading networked knowledge hub, involving key institutes and companies in order to combine:

- leading **scientific expertise**
- **unique research infrastructure**
- **advanced methodologies**
- further **development of new research methods** through internal research

Existing Initiatives



Full user-centred innovation portfolio

LIVING LAB will **test, evaluate and (co-)develop** sustainable and quality-of-life innovations:

1. Generating insights in the field through observation in existing homes
2. Prototyping and Alpha-testing with users in dedicated modular LIVING LAB dwellings
3. Beta testing in sustainable demo-homes



In this way it offers a **1-stop-shop for research on adoption of sustainable innovations**



Unique approach and capabilities

- Analysing **real user acceptance** and **true sustainability** of new products/technologies
- Access to a large number of end users (consumers) in **real-life settings**:
 - people in their own home or living in the 'lab' for a few days or weeks
 - Also intermediate users (in construction, installation, product development, etc.)
- Capable of testing **building integrated systems**, not just single products
- Possibility for parallel **cross-cultural research** at locations in different countries

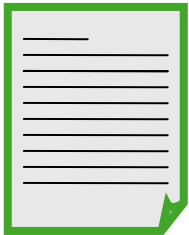
LIVING LAB locations

- LIVING LAB locations will be located around Europe hosted by a local partners and consist of:
 - Flexible, modular dwellings
 - Existing houses and new sustainable demo-homes in residential areas
 - Facilities for research staff

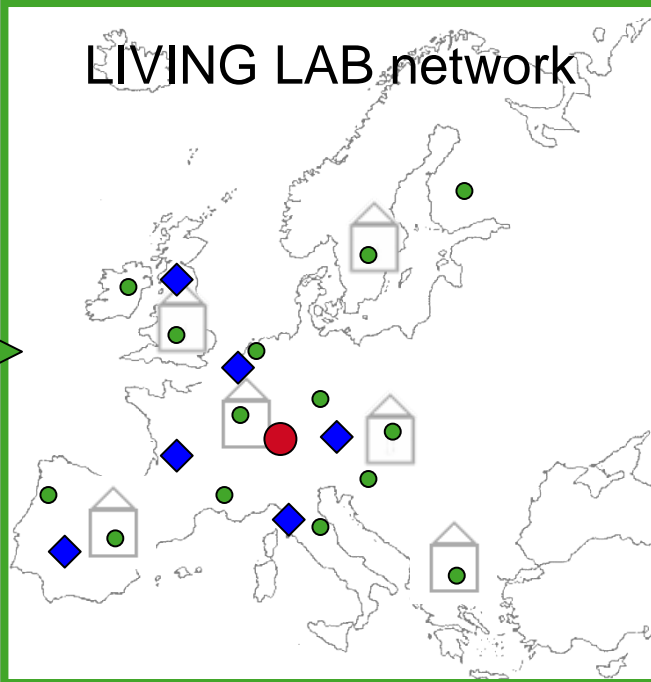


Phasing of infrastructure development

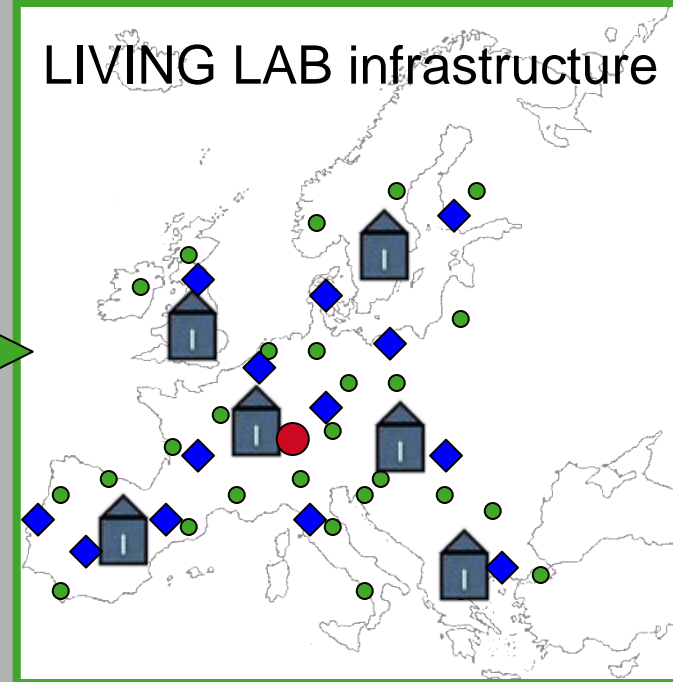
design study



LIVING LAB network



LIVING LAB infrastructure



Note that this map is indicative: locations of ICO, facilities, etc. are not yet defined

2009

2010

2011

2012

2013

- International coordination office (ICO)
- ◆ Industrial partners
- Academic partners and network members

- 🏠 locations with research infrastructure
- 🏠 locations under construction

Financing

- Hosting partner, public entities and private investors make **investments** in infrastructure at locations
- Public and private sponsors at European and location level cover (part of) **running costs**
- Contract research with clients at (semi-)commercial rates generates **income from research**
- **Public co-funding** from local, regional, national government and EU generates additional income
- Possibility for **in-kind contributions** (e.g. by hosts, research organisations providing staff, etc.)
- **Other sources of income** include network member fees, sponsoring of events, etc.

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