

## Living Laboratories in Oxfordshire

Like the rest of the UK Oxfordshire must address current infrastructure needs in energy, health, transport and housing, whilst at the same time better connecting communities, reducing isolation and promoting healthy places. We have a real opportunity to design our shared future with new and innovative approaches.

Oxfordshire Living Lab is a testbed for innovation to solve the UK's Grand Challenges and accelerate the adoption and accessibility of innovative solutions to infrastructure, climate change and healthy communities.

*Living Labs are defined as user-centred, open innovation ecosystems based on systematic user co-creation approach, integrating research and innovation processes in real life communities and settings[1].*

This will include future-proofing communities by preparing for technological and environmental change including the advent of connected and autonomous travel, green fuel solutions, smart homes, integrated energy systems and sustainable and healthier living. We will continuously develop this model in Oxfordshire, working with others throughout the UK. We can deliver Living Labs as we have the component parts to integrate and showcase that will attract global industry and global investors. The challenge is to make this work for the public and industry together.

### **Real people, real places, real solutions**

Solutions are demonstrated as fit-for-purpose, investable and appropriate/fitting to ecosystems (e.g. transport, housing, health, energy, industry) nationally and internationally, including evidencing user-led development and public acceptance.

A Living Lab brings together multidisciplinary, multi-sector teams and supply chains to collaborate to explore opportunities for:

- **Co-creation of solutions** by bringing together technology push and market-pull factors across a diverse range of viewpoints, constraints and knowledge levels to sustain the exploration of new scenarios, concepts, related potential products/services, business models and solutions.
- **Exploration** by engaging all stakeholders, especially user communities, at an earlier stage of the co-creation process to discover emerging scenarios, usages, commercial models and behaviours through live scenarios in real or virtual environments.
- **Experimentation** that implements appropriate technology as part of a process to benchmark live scenarios involving large number of users whilst, in parallel, collecting data for analysis.
- **Evaluation** that assesses innovative concepts as well as related technology in real life situations through various dimensions such as socio-ergonomic, socio-cognitive and socio-economic aspects. It is the observation of what happens when technology confronts user value models that roots a Living Lab in real feedback rather than experimental learning.

Living Labs are not unique to Oxfordshire, but we are ideally placed to deliver a cross sector approach. We want to build 'connected communities' that use the best of these new technologies for the benefit of different types and sizes of community in diverse locations across the County. Through the Living Laboratory evaluation and feedback on

the latest technology, products and services can be made at a scale, to demonstrate proof of concepts, scalability for governments, multi-national industries and investors, in real places, involving real people going about their normal lives. By its nature it will be open and transparent and inclusive of communities.

We are already seeing opportunities arise, especially as technologies begin to converge. For example, between digital health initiatives and new mobility solutions for people and goods, that draws on data measured from space and collected in our homes and between clean energy production and distribution, emissions and waste management which could involve national and off-grid networks.

These convergences have significant potential to shape our communities, improving quality of life and standards of living whilst also addressing critical challenges of clean growth, mobility, ageing society and how we develop new approaches including AI. This plays to our regional strength – global leadership in science-based innovation, research and development.

Diverse communities within the Living Lab will be encouraged to be involved in the testing and evaluation of products, services and solutions; they will require a broad range of methods to capture both social and physical data on order to undertake rational analysis. Generating and understanding data is critical to demonstrate proof of concept, business case, minimum value proportions and the scalability of solutions to governments, industry and investors to accelerate their introduction.

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[1] retrieved from <https://enoll.org/about-us/>

## Question 27

### **Living Labs - What do you think?**

How do you think new technologies can best be employed? How do you feel about Oxfordshire being at the forefront of improvement? Would you like to be more involved in Living Labs?

To respond please use the online consultation form.