

## Knowledge Exchange Activity

By exploring how digital technologies can help connect our communities and improve our health and wellbeing, Smartline is supporting SMEs based in Cornwall and the Isles of Scilly develop innovative products, processes and services.

Smartline is actively supporting SMEs new to this market, as well as those already engaged in it who are innovative and looking to grow through a range of Knowledge Exchange approaches;

Idea generation grants

In-residence schemes

Follow on research and cash grants

## Contact Us

For more information about the project visit the Smartline website at [www.smartline.org.uk](http://www.smartline.org.uk) or contact the team at  
Email: [smartline@exeter.ac.uk](mailto:smartline@exeter.ac.uk) / Tel: 01872 258140

### In order to work with us you need to meet our eligibility requirements:

- ▶ Your enterprise must be based (or going to be based) in Cornwall and the Isles of Scilly.
- ▶ Your enterprise must have less than 250 employees (FTE) and an annual turnover of less than €50m euros (approx £43m), or total assets of less than €43M (approx. £36M).
- ▶ No other enterprise owns more than a quarter of your enterprise's issued shared capital.
- ▶ Your company is not in financial difficulty.
- ▶ You must not have received more than €200,000 in state-aid during the last 3 rolling fiscal years.
- ▶ You need to agree to the publishing of research findings.

Smartline

Smart wellbeing inspired by the community

For more information please visit us at:  
[www.smartline.org.uk](http://www.smartline.org.uk)



European Union  
European Regional  
Development Fund

South West  
Academic Health  
Science Network

Smartline

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Smartline  
Data

Supporting Innovation

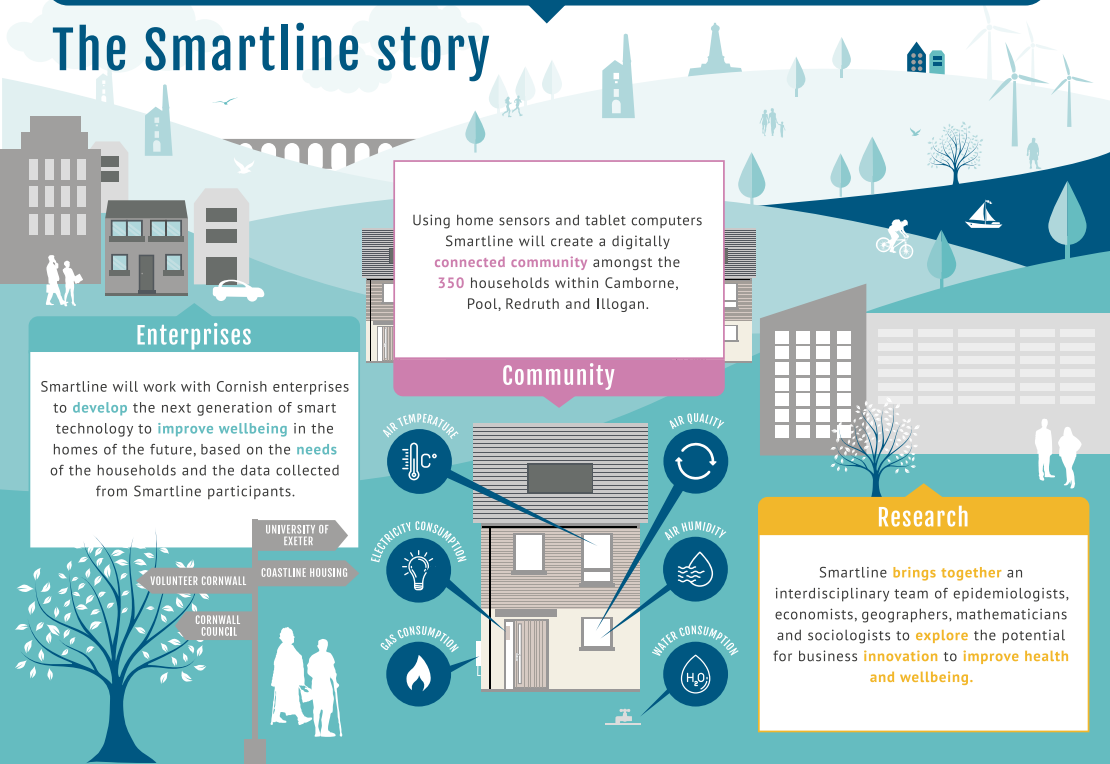
Smartline is an exciting research project looking at how technology can be used to help us live healthier and happier lives. We are a partnership project led by the University of Exeter with Coastline Housing Ltd, Cornwall Council and Volunteer Cornwall.

Smartline is working with local communities and has installed environmental sensors in the homes of 300 participants in the Camborne, Pool, Illogan and Redruth area of Cornwall. The sensors are collecting information on indoor air quality, humidity, temperature, and how much water and energy is used.

Participants have also been taking part in surveys, guided conversations and interviews to help researchers understand their wellbeing needs, aspirations and desires for their community.

Smartline is a three year project funded by the European Regional Development Fund and the South West Academic Health Science Network.

## The Smartline story



## Smartline Data

900,000 additional data points each day

A key aim of Smartline is to make data available to enterprises (both in Cornwall and beyond) through its website/data portal.

Using the USMART portal it is possible to access the data collected by Smartline which includes average temperature, humidity, air quality, and utility usage. You will be able to compare properties that have varying numbers of people living in a home and the impact that can have on the energy usage, or the temperature and air quality of the home.

It will also be possible to access a range of other data collected through Smartline. This currently includes anonymised information on participant wellbeing, volunteering rates and information on physical buildings, such as when houses were build and what materials were used.

Smartline aims to continually expand on the data available through USMART and invites prospective enterprises to suggest new ideas, contribute data and to support with the analysis of this exciting resource.

## How to access the data

- 1 Register your interest at [www.smartline.org.uk/data](http://www.smartline.org.uk/data)
- 2 USmart Login details will be provided
- 3 Access Smartline Data via USMART <https://usmart.io/#/>

## Smartline Realtime Sensor Data Set

Collection Frequency: 5 Minutes (288/day/sensor)

| Sensors           | Units             | Range                  | Location   | Quantity      |
|-------------------|-------------------|------------------------|------------|---------------|
| Humidity          | %RH               | 0 - 100%RH             | Bedroom    | 315           |
|                   |                   |                        | Front Room | 315           |
|                   |                   |                        | Outside    | 29            |
| Temperature       | °C                | -40°C to +123.8°C      | Bedroom    | 315           |
|                   |                   |                        | Front Room | 315           |
|                   |                   |                        | Outside    | 29            |
| eCO2              | ppm               | 400ppm to 8192ppm      | Front Room | 315           |
|                   |                   |                        | Outside    | 29            |
| TVOC              | ppb               | Oppb to 1187ppb        | Front Room | 315           |
|                   |                   |                        | Outside    | 29            |
| PM2_5             | µg/m <sup>3</sup> | 0 µg/m3 to 1,000 µg/m3 | Front Room | 315           |
|                   |                   |                        | Outside    | 29            |
| PM10              | µg/m <sup>3</sup> | 0 µg/m3 to 1,000 µg/m3 | Outside    | 29            |
| Electricity Meter | Amps              | —                      | Property   | 315           |
| Electricity Meter | kWh               | —                      | Property   | 315           |
| Water Meter       | Litre             | —                      | Property   | 24            |
| Gas Meter         | m <sup>3</sup>    | —                      | Property   | 56            |
| <b>TOTAL</b>      |                   |                        |            | <b>3089</b>   |
| <b>READS/DAY</b>  |                   |                        |            | <b>889632</b> |

### PROPERTY DATA

| PROPERTY DATA | DESCRIPTION                 |
|---------------|-----------------------------|
| UPRN          | Unique Property Reference   |
| DateBuilt     | Year property Built         |
| EPC_Figure    | Current EPC Rating Figure   |
| EPC_Code      | Current EPC Rating Code     |
| PotentialEPC  | Potential EPC Rating Figure |
| Bedrooms      | Number of Bedrooms          |
| PropertyType  | Type of Property            |
| HeatingType   | Type of Heating             |

### SURVEY DATA

|                                 |                    |
|---------------------------------|--------------------|
| Demographics                    | Time spent indoors |
| Existing home technology        | Physical activity  |
| Pets                            | Smokers/Vaping     |
| Type of heating and ventilation | Volunteering       |
| Presence of mould               | Employment status  |