Resilient Infrastructure: Strength in Places Fund Bid

The opportunity:

There is an opportunity to bid for Strength in Places (SIP) Wave 2 funding. Expressions of interest (EOIs) selected at stage 1 (March 2020) will receive £50k to develop full proposals (by September 2020). Projects successful at stage 2 (decisions by March 2021) will receive £25m to £50m covering a 3-5 year project duration. The deadline for EOIs is **9**th **October 2019**.

The aims of SIPF are:

- To support innovation-led economic growth and business productivity within a defined 'economic geography' by identifying R&D strengths that are driving clusters of businesses that have the potential to innovate or adopt new opportunities, in order that those clusters become nationally and internationally competitive; and
- To enhance local collaborations involving research and innovation between businesses and the knowledge base

Resilient Infrastructure: the idea

To boost innovation and productivity amongst businesses and increase collaboration between stakeholders that are involved in the development of housing and its related critical infrastructure in the Thames Estuary and wider counties of Essex and Kent

The Thames Estuary is the gateway to Europe critical connectivity to London and rest of UK. It is home to nationally important infrastructure, e.g. the Thames Barrier, Port of Tilbury, rail links to Europe and power, fuel and gas supply lines which all impact housing supply and business growth. It presents particular challenges in terms of flood risk, congestion, air quality, power generation and climate change. It is also a location with significant economic and housing growth potential, with expectations of many hundreds of thousands of new homes by 2050.

Meanwhile, there is a growing gap between housing delivery and projected housing need. Stakeholder networks and collaboration within the housing sector and between housing and other sectors (e.g. insurance, data analytics) are weak. Business productivity and business exports in construction are particularly low. And urgent action is needed to meet the Government's ambition for net zero carbon by 2050.

The focus for the proposal:

Building materials and design – ranging from residential and commercial buildings to flood defences and power stations

Risk management and insurance – how these shape investor, producer and consumer decisions

Behavioural change - public, consumer and producer acceptance of innovation and the civic and sector leadership needed to promote change

Use of sensor technology and data – how data and analysis can be used to optimise the design, life expectancy, resilience, performance-monitoring and whole-life cost of infrastructure

The Zero Carbon challenge – Green energy production and innovation in processes and materials to reduce carbon footprint

How the funding might be used:

Knowledge transfer and exploration: forums that bring together public sector, businesses and researchers; Senior stakeholder engagement to explore research and innovation at a systemic level; International R&D delegations; Industry fellowships

Direct project funding: Creation of test beds and 'living labs' to test new products/solutions; Funding for projects between universities and business to embed new knowledge and capability; Seed-corn funding to test new ideas, and larger scale funding for collaborative research projects; Funding for commercialisation and export readiness

An emerging partnership:

Higher Education Institutions - Anglia Ruskin University (ARU), University of Essex, University of Kent, University of Greenwich

Public sector partners - Opportunity South Essex, Thames Gateway Kent Partnership, Southend-on-Sea Borough Council, Thurrock Council, Other County and District Councils and Agencies (tbc)

Business Partners – including Swan Housing, Leonardo, Wilmott Dixon, Ascend Broking Group, Others to be confirmed