



EAST OF ENGLAND SMART EMERGING TECHNOLOGIES INSTITUTE – SETI



**DRIVING THE INNOVATION ECOSYSTEM
OF THE FUTURE FOR THE BENEFIT OF THE UK**

WE'VE GOT A BIG AMBITION.

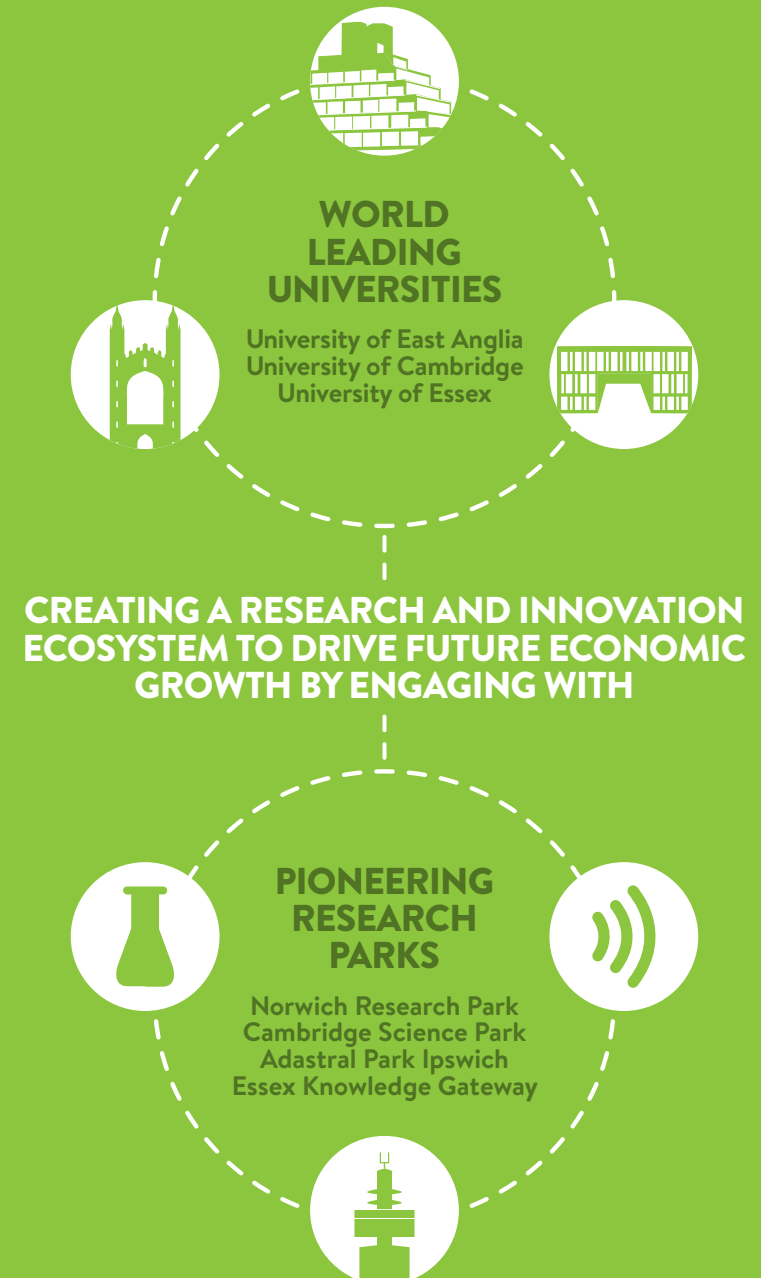
To create Europe's fastest interconnected research and innovation testbed. Right here in the East of England.

SETI.

“By enabling collaboration between world-leading scientists and engineers, SETI will deliver research and innovation programmes never before possible. It will accelerate knowledge creation, speed up innovation and commercialisation, identify new value chains, boost productivity and develop solutions of national and global significance.”

PROF GERARD PARR MBE

Lead Proposer, Chair in Telecommunications Engineering,
Head of School (Computing Sciences), University of East Anglia (UEA)



WHAT SETI IS AND WHY DO WE NEED IT?

The East of England Smart Emerging Technologies Institute (SETI) is a planned research and innovation initiative aiming to create the fastest collaborative research testbed in Europe. It will be a science, technology and business asset for the region that will push the boundaries of leading science research and benefit the UK as a whole.

- SETI will fulfil one of the eight priority interventions of the Department for Business, Energy and Industrial Strategy's *East of England Science and Innovation Audit* by enabling increased collaboration and connectivity between research centres of excellence.
- The facility will be a powerful asset driving scientific breakthroughs in the priority areas identified in the national and local industrial strategies: renewable energy, agri-tech, life sciences, health, and transport and logistics.
- SETI will draw on the regions many strengths, including its strong agricultural and industrial heritage and world-class universities and research organisations.
- SETI will provide excellent support for innovative businesses who want to benchmark and experiment with new technologies before entering the market, exploiting data technologies such as artificial intelligence (AI), the Internet of Things (IoT) and 5G.

£60 billion

**DATA-DRIVEN TECHNOLOGIES ESTIMATED
CONTRIBUTION TO THE UK ECONOMY BY 2020**



**SETI WILL BE A
UNIQUE RESEARCH
AND INNOVATION
RESOURCE**



HOW SETI WORKS

SETI will nurture a unique ecosystem, supporting research, innovation, benchmarking and validation of new applications and services, through large-scale testbed experiments using the latest machine learning, AI and digital communications technologies across the East of England's key sectors.

- SETI will be a virtual institute led by UEA. By linking world-leading researchers with in-region facilities and local industrial stakeholders, it will enable research to move to large-scale field trials more quickly and easily.
- It will provide support from concept to prototype, through to validation, demonstrating smart technology in the field and at scale, and creating valuable real-world, real-time data along the way. This makes it easier to turn research insights into future business plans that ultimately provide jobs and grow the economy.
- Improved collaboration and interlinked 5G and IoT testbeds will enable improvements in areas such as assisted living, health, environmental monitoring, smart agri-tech and supply-chain logistics.

AGRICULTURAL TESTBED EXAMPLE



RESEARCH TO FIELD

SCIENCE DEVELOPED
ACROSS THE SETI
ECOSYSTEM WILL BE MOVED
TO LARGE-SCALE FIELD
TRIALS QUICKLY AND EASILY

DATA TRANSFER
WILL BE MORE THAN

1000

TIMES FASTER
THAN BROADBAND

WHY IS SETI GOOD FOR THE EAST OF ENGLAND AND UK?

SETI will unlock the full potential of the East of England's research and innovation ecosystem, the knock-on effect of which will benefit the whole UK.

- **WE HAVE** sectors and emerging businesses already capturing and using data, cloud computing, AI, the IoT and 5G.
- **WE NEED** a focal point to bring these groups together, to experiment with new product and service prototypes collaboratively, to enable future down-streaming for new market offerings nationally and internationally.
- **IT IS VITAL** that we have the capacity and insights into the digital systems and tools that will enable secure capture, transfer and analysis of data, in order for the UK to maintain its competitive advantage across a range of sectors important to the economy.

SETI CAN BE PART OF THE PRODUCTIVITY SOLUTION FOR THE UK

SETI'S NATIONAL IMPACT

THE EAST OF ENGLAND'S STRATEGIC CONTRIBUTION TO THE REST OF THE UK:

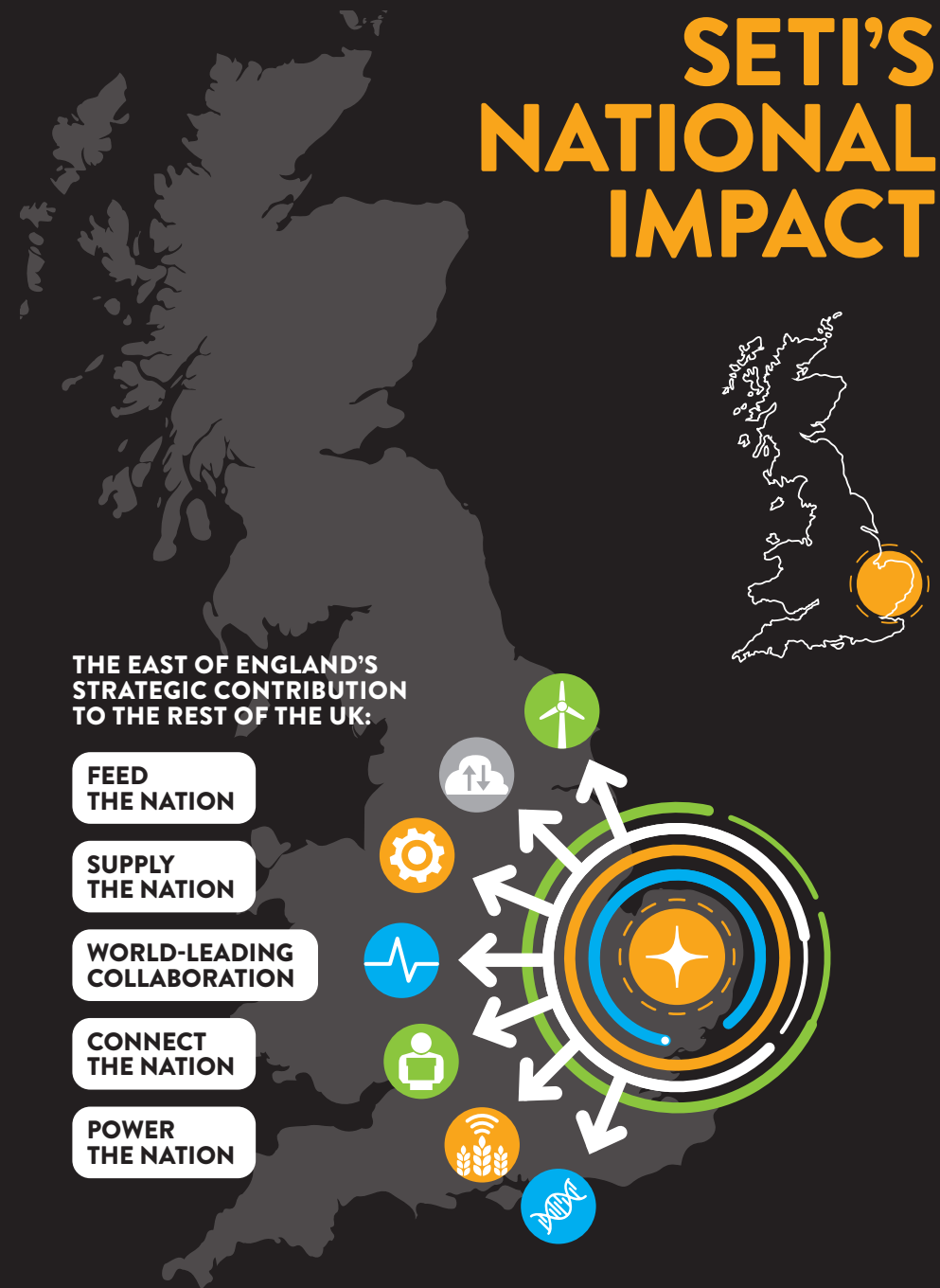
FEED THE NATION

SUPPLY THE NATION

WORLD-LEADING COLLABORATION

CONNECT THE NATION

POWER THE NATION



THE KEY SECTORS

SETI will support testbed experiments in a range of science and engineering areas for all of the key sectors in the region, and will underpin scientific progress in these priority areas identified in national and local industrial strategies, and defined by UK Research and Innovation, including:

AGRI-TECH.
RENEWABLE ENERGY.
HEALTH AND SOCIAL CARE.
INFORMATION AND COMMUNICATIONS TECHNOLOGY.
INTELLIGENT MANUFACTURING.
TRANSPORT, LOGISTICS AND SUPPLY CHAIN.
LIFE SCIENCES.
MEDICAL IMAGING.



WHY SETI IS GOOD FOR BUSINESS

SETI will be a leading asset to experiment with, validate and scale new data intensive applications and services to enable new business opportunities. It will:

- Be a catalyst to improve collaboration between businesses and university research expertise.
- Contribute to the long-term vision to increase the level, quality and impact of research and innovation in the East of England region and across the UK.
- Develop up-skilling in a range of areas including data science, AI, software engineering, app development, digital communications, testing and validation.
- Reduce technical barriers to innovation and improve opportunities to engage with research expertise.
- Help enterprises scale-up and encourage the creation of more start-ups.
- Promote an ICT research and innovation resource for the government, public sector and industry to test ideas such as digital transformation and smart cities.

GETTING BUSINESS ON BOARD

The **CAMBRIDGE NORWICH TECH CORRIDOR**, along with the **NEW ANGLIA LEP**, **SOUTH EAST LEP** and various **TECH CLUSTERS**, will champion SETI and assist the core SETI stakeholders, identifying businesses and projects which could utilise the SETI ecosystem, and lobbying for funding and support.

SETI'S BENEFITS AT A GLANCE



BUSINESSES ARE READY FOR SETI



“SETI is an exciting initiative that will help drive agri-tech in the Eastern region

and beyond. By bringing farmers and agronomists together with world-leading research expertise and facilities, SETI’s improved collaboration and connectivity will allow innovative ideas and research to be tested more easily and at a larger scale.

SETI will hugely benefit the agri-tech community by creating a faster route to commercialisation for solutions to some of the real-world challenges facing agriculture. These include smarter systems using cutting edge technology, concept validation on a huge scale, and increased productivity, which we expect will lead to increased economic growth in the sector. By reducing the technical barriers to increased research and innovation quality, SETI will support Agri-TechE by adding significant value to the existing agri-tech innovation ecosystem.”

DR BELINDA CLARKE
Director, Agri-TechE



“The opportunities SETI presents to the clean energy sector are significant and unique, not only for the East of England but for the UK as a whole. As an epicentre for clean energy generation, the Eastern region plays a pivotal role in powering the nation, as well as a leading role in offshore wind power. SETI will support the sector by improving the sharing of data, tools and expertise, as well as increasing the availability of highly skilled scientists and engineers.

SETI will help nurture the East of England’s thriving research and innovation environment, and contribute to long-term targets of increased productivity, increased inward investment and increased economic growth that will have a beneficial effect felt across the UK.”

JOHNATHAN REYNOLDS
Managing Director, Opergy Ltd



The combined power of world-leading universities, research parks and innovation organisations creates outstanding opportunities for collaboration within the SETI ecosystem, and SETI already receives a vast amount of support from a long list of stakeholders, not all of whom could be named in this brochure.



**CONTACT US TO FIND OUT MORE
AND BECOME PART OF THE
EVER-GROWING SETI NETWORK**

business@uea.ac.uk
www.uea.ac.uk/business

**TO FIND OUT MORE
ABOUT SETI OR
EXPRESS AN INTEREST**

**CONTACT UEA'S RESEARCH
AND INNOVATION TEAM**

**business@uea.ac.uk
www.uea.ac.uk/business**