Grand new research project will ensure a green *and* safe digital future

A new and unique Danish research collaboration will create an advanced innovation platform, simultaneously ensuring a far more intelligent and safe digitalisation in all corners of society, and a significantly greener and more energy efficient set of digital solutions. Innovation Fund Denmark contributes 40 mill. DKK.

Every time one tonne of CO_2 is emitted to run the internet, today society saves 1.5 tonnes elsewhere, because procedures are made more effective. This factor 1.5 is predicted to rise to 10 in a few years. Therefore, the internet is a crucial tool and a decisive underlying prerequisite to make the green transition possible. At hospitals and ministries, wind turbines and district heating power plants, media, the transportation and farming industry, the Defence, and private homes – in all these contexts we need digital solutions consuming less power and providing a better defence against cyberattacks than today.

A unique collaboration
A remarkable Danish collaboration named GreenCOM, consisting of 18 companies, 2 universities, 2 research- and technology organizations (GTS institutes), and 2 trade associations, will now come up with an egg of Columbus, which at the same time ensures more digitalisation and a green transition. The collaboration will result in 30 pathbreaking technology transfers to the industry, and this will ensure a digital infrastructure enabling internet connections to transport a larger amount of data considerably faster, cheaper, safer, and greener than today. When the technological innovation platform of GreenCOM has been launched, it has the potential to reduce the electricity consumption in Denmark with up to 10%. Remarkably, this also implies a further digitalisation of Danish society.

We must be able to measure green standards
GreenCOM is launching a so-called Triple Helix collaboration between universities, major companies, trade associations, and start-up companies, in an effort to establish a certification of all the components and elements of the internet. This will make it possible for us to consider which solutions are factually greenest.

'As a novelty, GreenCOM will take the initial steps towards a fact-based, accredited energy certification of communication technologies- and services in the entire value chain. We must be able to weigh and measure how green the products and services in the ICT industry are, in a truly transparent and accountable manner. As well, this will provide a competitive edge for Danish companies who are already amongst the greenest in the world', states Project Head, Niels-Kristian Hersoug.

More jobs
The perspectives are broad-ranging and promising. Not only will GreenCOM deliver a greener, faster, and safer internet, in addition the project will generate more jobs in Denmark. The partners expect to create 150 full-time jobs five years after the end of GreenCOM in 2025. In many important domains, digital solutions will now emerge to lay the foundation for an even more sustainable and competitive Danish society. With the support from Innovation Fund Denmark, we will potentially become one of the world's most digitalised, resilient, and green societies.

'The internet is a key to fight climate change, and also a technological challenge. This is because increased digitalisation may help us reduce waste and save considerable amounts of energy in society at large. At the same time, the energy consumption of the internet is set to rise exponentially unless new and more energy-efficient communication technologies are developed. The 24 partners of GreenCOM now commence that work. Together, GreenCOM and Innovation Fund Denmark will thus contribute to Denmark and all of us taking a green and safe leap into a digitalised future', says PI, professor at DTU, Leif Katsuo Oxenløwe.

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Facts:
The investment of Innovation Fund Denmark: 40 mill. DKK.
Complete budget: 54 mill. DKK.
Duration: 3 years.
Official title: Innovative solutions for next generation of Green COMmunications infrastructures.

Quotations that may be used:

GreenCOM Partner Ditte Haugaard Clausen, Lead Sustainability Officer, KMD, and chairperson for the Danish ICT Industry Association (IT-Branchen's) Policy Board for the green transition:
'The role of digitalisation in the green transition is a strategic focus area for the Danish ICT Industry Association (IT-Branchen) and for KMD. We want to make sure, that we are part of the solution to the climate challenge. We therefore look forward to the extensive GreenCOM collaboration, ranging from universities to SME's.'

GreenCOM partner Jacob Høxbroe Jeppesen, CEO, Atla.ai:
'The ICT-technology is crucial to enable the world to deliver the green transition, and it is crucial for Atla.ai to extract geo-information from satellites, as this has value for the farming industry, forestry, construction, water management, and governments in delivering the green transition. We therefore look forward to the GreenCOM collaboration, and not least to benefit from the extensive collaboration amongst the 24 partners.'

The partners:

Companies:
Accelink Denmark A/S
Atla.ai
Bifrost Communications ApS
Chocolate Cloud ApS
Comcores ApS
Danish Optical Fiber Innovation
Develco Products A/S
KMD A/S
NKT Photonics A/S
OFS Fitel Denmark ApS
Rejoose ApS
Sky-Watch A/S
Space Inventor ApS
Sparrow Quantum ApS
SPIO Systems ApS
STACK Infrastructure
TimeLens ApS
Zeuxion ApS

Universities:
DTU
Aarhus University

Research- and technology organizations (GTS institutes):
Alexandra Instituttet
FORCE Technology

Trade associations:
DI Digital
IT-Branchen