



## **GREENEDGE - Taming the environmental impact of mobile networks through GREEN EDGE computing platforms**

Modern communication networks are rapidly evolving into sophisticated systems combining communication and computing capabilities. Computation at the network edge is key to supporting many emerging applications, from extended reality to smart health, smart cities, smart factories and autonomous driving. Multi-access edge computing (MEC) technology is being developed to deliver the required computation functionalities closer to user devices, directly at mobile access points. GREENEDGE is motivated by the fact that the large scale adoption of MEC technology, while benefiting human productivity and efficiency, will result in a surge of data and computation in mobile networks, which, in turn, will exacerbate their energy consumption. GREENEDGE is set out to tame the growing carbon footprint of MEC technology, devising highly energy efficient communication and computing functionalities for the network edge, combining them with ambient energy sources and with new energy storage and supply paradigms. As a result, GREENEDGE technology will allow mobile systems to offer the much anticipated communication and computing services in a sustainable manner. Fifteen early stage researchers (ESRs) will be trained by a consortium of world-class leaders across the fields of energy harvesting, storage, edge computing, optimization, machine learning and wireless communications. Ample inter-sectoral opportunities will be offered thanks to secondments among academy/research centers, two network operators, and other prominent industrial partners operating in the domains of Internet of Things, smart cities, critical infrastructure management and data analytics. A carefully planned and coordinated training and research program will ensure excellent employability prospects for the ESRs after the project completion.

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**Find out more:** <https://cordis.europa.eu/project/id/953775>