Key Enabling Technologies - Artificial Intelligence and the Blueprint for Sectoral Cooperation on Skills

The Award Criteria for the Blueprint for Sectoral Cooperation on Skills indicates that proposals including digital and key-enabling technologies (KETs) will be considered highly relevant.

KETs are a group of six technologies: Advanced manufacturing technologies, Advanced materials and Nanotechnologies, Life science technologies, Micro-nanoelectronics and photonics, Artificial Intelligence, Security and connectivity. KETs have applications in multiple industries and help tackle societal challenges. Countries and regions that fully exploit KETs will be at the forefront of creating advanced and sustainable economies and help Europe to keep up with its competitors. In 2017, these KETs were confirmed, with the addition of Artificial Intelligence, by the High-level Strategy Group on Industrial Technologies1, established by Commissioner Carlos Moedas.

The economic impact of KETs is considerable: The global market for KETs was estimated to be more than EUR 1 trillion in 2015 with the growth potential of 10 to 20% per year depending on the KET. KETs have huge potential for growth and employment. The absolute employment enabled by all six KETs amounted to 3.3 million employees in 2013. SMEs are expected to account for the majority of future jobs in KETs.

Artificial Intelligence (AI) is a typical KET with applications across economic sectors. The economic impact of automation of knowledge work, robots and autonomous vehicles will reach between EUR 6.5 and EUR 12 trillion annually by 2025. AI offers not only efficiency gains in business but also huge potential for new creative activities.

In the Communication on “Artificial Intelligence for Europe”2, the Commission proposed a European approach to make the most of the opportunities offered by AI. The actions outlined in the Communication include increasing public and private investments, preparing the workforce with the skills needed, and ensuring an appropriate ethical and legal framework.

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1 https://publications.europa.eu/en/publication-detail/-/publication/28e1c485-476a-11e8-be1d-01aa75cd71a1