Industry 4.E

INITIATIVE FOR EXCELLENCE IN DIGITAL INDUSTRY

ECSEL
Joint Undertaking

ENABLING EUROPEAN INDUSTRY TO ACHIEVE DIGITAL TRANSITION AND STRONG COMPETITIVENESS

THE CHALLENGE

The digitalisation of industry – **Industry 4.0** – is rapidly transforming all stages of the production value chain of goods globally. Advances in robotics, data collection, cybersecurity and other technologies are creating increasingly efficient, flexible and tailored manufacturing processes. If exploited, these technologies could create huge growth in European industries. The Industry4.E Lighthouse initiative will bring together stakeholders from across digital industry. Uptake of results from pioneering research will be accelerated through targeted activities, addressing major challenges across the EU.

Five major challenges for digital industry

MC1: Developing digital twins, simulation models for the evaluation of industrial assets at all factory levels, and over system or product life-cycles

MC2: AI-enabled cognitive, resilient, adaptable manufacturing

MC4: Human-centred manufacturing

MC3: Developing digital platforms, application development frameworks that integrate sensors/actuators and systems

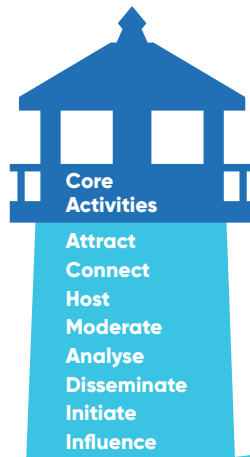**MC5: Sustainable manufacturing in a circular economy**

ECSEL LIGHTHOUSE INITIATIVE

ECSEL Joint Undertaking (JU) is an EU-driven public-private partnership, funding innovation in electronic components and systems (**www.ecsel.eu**). ECSEL JU has created **"Lighthouse initiatives"** as they identified the need to better coordinate and link Research, Development and Innovation (RDI) activities taking place in order to help European industry achieve digital transition and strengthen Europe's competitiveness. Three Lighthouses have been launched to date; **Industry4.E**, Mobility.E and Health.E. All Lighthouses are supported by ECSEL JU but are expected to operate independently across all programmes and initiatives. Each Lighthouse is led by an advisory committee called a LIASE (Lighthouse Initiative Advisory Service).

www.Industry4E.eu

Industry4.E Lighthouse

'To support the digital transition of European industry in the area of RDI with a special focus on all means of microelectronics and ICT'

Core Activities

- Attract
- Connect
- Host
- Moderate
- Analyse
- Disseminate
- Initiate
- Influence

Expected Outcomes

Improvement
Continuity
Sustainability
Cross domain
Leadership
Standardisation
European team spirit

Industry4.E Lighthouse will focus on all means of microelectronics & ICT for Digital Industry. Operating across project, funding, and national boundaries, Industry4.E is expected to bring together relevant RDI projects funded across various funding programmes, helping them to connect with each other and the end-user/stakeholder community.
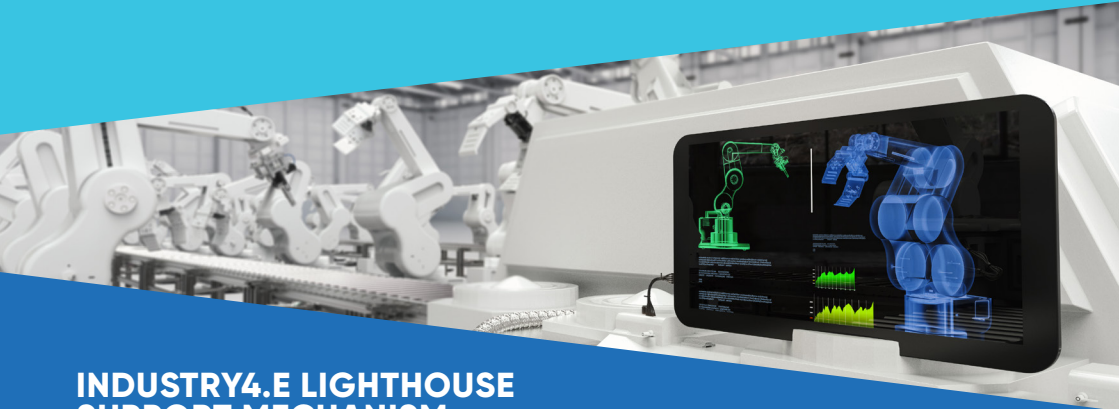
INDUSTRY4.E LIGHTHOUSE PROJECTS

- **Productive4.0** www.productive40.eu
- **MANTIS** www.mantis-project.eu
- **SWARMs** www.swarms.eu
- **SemI40** www.semi40.eu
- **Delphi4LED** www.delphi4led.org
- **I-MECH** www.i-mech.eu
- **SCOTT** www.scottproject.eu
- **iDev40** www.idev40.eu
- **AFarCloud** www.afarcloud.eu
- **MADEin4** www.semi.org/eu/MADEin4
- **Arrowhead Tools** www.arrowhead.eu
- **CPS4EU** www.cps4eu.eu
- **AI4DI** ai4di.automotive.oth-aw.de
- **CHARM** www.charm-ecsel.eu
- **iRel4.0** www.irel40.eu

IN COOPERATION WITH OTHER EUROPEAN, REGIONAL, AND NATIONAL INITIATIVES AND PROJECTS - INCLUDING:

- **EFFRA (www.effra.eu)**, the private representative in the Factories of the Future Public-Private Partnership under Horizon 2020, and I4MS (www.i4ms.eu).

INDUSTRY4.E LIASE (LIGHTHOUSE INITIATIVE ADVISORY SERVICE)

- **Andrew Lynch** - Irish Manufacturing Research (IMR) (IE)
- **Chris Decubber** - European Factories of the Future Research Association (EFFRA)
- **Eduardo Beltrán de Nanclares** – Mondragon Corporation (ES)
- **Knut Hufeld** - Infineon Technologies AG (DE)
- **Olli Ventä** – VTT (FI)
- **Jerker Delsing** - Lulea University of Technology (SE)
- **Oscar Lazaro** - Innovalia Association (ES)
- **Sandro D'Elia** - European Commission

Industry4.E
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INDUSTRY4.E LIGHTHOUSE SUPPORT MECHANISM

To support the implementation of activities in relation to the **Industry4.E** Lighthouse, ECSEL JU and Horizon 2020 have funded a Coordination and Support Action (CSA) for 30 months starting in October 2018.

CSA-**Industry4.E** intends to:

- Support the LIASE in establishing the Lighthouse

- Actively assist in enabling successful execution of the Digital Industry roadmap

- Engage research communities - coordinate the relevant stakeholders, project consortia and policy-makers

- Facilitate, support and assist **Industry4.E** projects in effectively exploiting project results

- Promote the Lighthouse visibility

- Public engagement and outreach

CONTACT US:
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www.Industry4E.eu

Irish Manufacturing Research

CSA-INDUSTRY4.E PARTNERS

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AQUATT — Science. Communication. Knowledge. Innovation.

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