∑eureka Clusters Sustainability Call 2022

Welcome to the Brokerage event

23 March 2022

CELTIC-NEXT ∑eureka Cluster

eurogia2030

ITEA4

∑smart advanced manufacturing

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Eureka Clusters Sustainability Call 2022 Brokerage event

- 440 registrations from 31 countries
- 225 attendees in the morning session
- 30 project ideas in the Project Idea tool
- 10 Break-out sessions – 15 days to make more
- 19 Project Outlines are already started

Challenges

- Circular economy/reuse of production, materials, resources
  - Waste management and using more Sustainable materials, re-usable plastics
  - Less wear-tear in manufacturing and create awareness for cost management
  - Digitalization of material flow in agriculture
  - Tracking manufacturing for waste monitoring and managing waste for re-usibility
- Green ICT
  - Climate monitoring for potential disasters, and sustainability level in High resolution (up to building resolution)
  - Tracking in real-time the production data to present waste created in actionable format
  - Monitoring and managing Data Center Operations based on AI and digital twin
  - Environment monitoring, disaster and crowd management
  - SaaS platform on services (like data acquisition) for digitized carbon credit aggregation by Energy Efficient Blockchain Technologies

Challenges

- Smart and sustainable manufacturing including ICT manufacturing
  - Raw materials use saw machines and sustainability on saw machines has a big impact
  - AGI-like (Artificial General Intelligence) algorithm to gather the data from vibration - heat - visual- IoT sensors, cameras
  - 3D digital twin modelling is the key for environmental monitoring and measurement
  - Monitoring and measuring personnel productivity by obtaining instant data of operations
  - Autonomous re-programming and control of industrial robots
- Sustainable mobility and transportation
  - Developing digital twins for UAVs – for energy saving and reducing cost
  - Sustainable Urban Vehicles
  - Data management for better mobility and less consumption of energy
- Earth Ocean Space integrated systems for better observation systems and data exploitation
  - UAVs with a large spectroscopic device, over long distances of hundreds of kms, for a fraction of the cost of conventional aircraft

Challenges

- Components, systems and architectures for distributed intelligence and low power data transmission
  - Creating a remote sensing "one-stop-shop", complete image data production chain
  - A novel solution by adding edge computing in data generating and transmission
- Smart and sustainable logistics and supply chain management
  - Decreasing the carbon emission caused by especially land transportation & fossil fuel trucks
  - Developing a smart system that can allow a cost-efficient supply chain providing alternatives to improve the food life cycle and sustainability
  - Designing digital systems for efficient use of raw materials, reducing waste, reuse of wastes
- Other
  - Monitoring food fish health and anomaly detection in a super intensive culture
  - SaaS Platform using cloud and edge computing, IOT Sensors and Deep Learning Technologies to measure and report on sustainability metrics
  - A platform to analyze the effect of architecture on users allowing for a direct feedback loop to be incorporated into the design of buildings

Further steps

- Build up a strong consortium with (preferrable) a least 3-4 countries *(2 countries are sufficient legally)*
- Build a consortium with at least one industrial partner from each country *(Call rule)*
- Building up a market value chain and technology value chain
- Create break-out sessions and check what is happening
- Visit web sites (Call and Cluster web sites)
  - To learn successful projects
  - To find successful partners
- Merge project ideas and Clusters communities to build a better consortium
- Get in touch with Public Authorities (national contact points are listed on the funding webpage)
- Get help / support Cluster Offices
- Move Project Ideas to Project Outlines
- Submit Project Outlines (possible to do multiple times)

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Thank you

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