CLUSTERS AND INTERVENTION AREAS - HORIZON EUROPE

Horizon Europe Strategic Plan (2021 – 2024)

HEALTH

- **Health throughout the life course**: health promotion and disease prevention for citizens of all ages, including age-specific and sex/gender-specific needs, as well as special needs of vulnerable population groups (chronic health conditions, physical disabilities, mental disorders, disabilities, or age-related impairments).
- **Environmental and social health determinants**, including environmental, occupational, social, and economic determinants of health.
- **Non-communicable and rare diseases**.
- **Infectious diseases**, including poverty-related and neglected diseases, antimicrobial resistance, emerging epidemics, and pandemics.
- **Health care systems**: including strategies to provide equal access to innovative, sustainable, and high-quality health care. Development of innovative solutions for health care systems in all their various dimensions.
- **Tools, technologies, and digital solutions** for health and care, including personalized medicine and a large spectrum of tools and technologies for biomedical research, prevention, diagnosis, therapy, and monitoring.

CULTURE, CREATIVITY, AND INCLUSIVE SOCIETY

- **Democracy and governance**, including the development of innovations, policies, and policy recommendations, as well as institutional frameworks that expand political participation, social dialogue, civic engagement, and equality. It also includes trust in democratic institutions and media, and the protection of democracy from multidimensional threats, including disinformation.
- **Social and economic transformations**, including technology, globalization, demographics, mobility, and migration, but also emerging needs in education and the labour market.
- **Cultural heritage, and the Cultural and Creative Industries**, including protection, enhancement, conservation, and more efficient restoration of European cultural heritage and innovation of cultural and creative industries, contributing to sustainable growth and job creation.

CIVIL SECURITY FOR SOCIETY

- **Cybersecurity**.
- **Disaster-resilient societies**, including tools for first responders and tools to prevent, manage and reduce disaster risk.
- **Protection and security**: including tools for emergency services, analysis of cross-border crime, radicalisation, and fraud.
Manufacturing technologies, such as biotech production, additive manufacturing, intelligent robotics, AI, sensor technologies, advanced batteries, and hydrogen.

Advanced materials.

Circular Industries.

Low-carbon and clean industries, including process technologies, conversion technologies, electrification, and unconventional energy sources within industrial.

Key digital technologies, such as nanoelectronics and photonics.

Artificial intelligence and robotics.

Advanced Computing and Big Data, including High-Performance Computing (HPC).

Emerging enabling technologies, including the adoption of key digital and enabling technologies in industrial value-chains and strategic sectors such as automotive, industrial manufacturing, biotechnological production, energy-intensive industries, construction, energy sectors, aerospace, space, defence and security, and healthcare.

Next Generation Internet, 5G and the services they might support.

Space, including Earth Observation; autonomy in developing, deploying, and using global space-based infrastructures, services, applications, and data, including by reinforcing the EU’s independent capacity to access space.

Communities and cities, including decarbonisation, urban planning, and quality of life citizens.

Clean, safe and accessible transport and mobility.

Energy storage, including liquid and gaseous renewable fuels, batteries, and hydrogen

Smart mobility.

Industrial competitiveness in transport.

Climate science and solutions, including the impact of climate change, solutions for its mitigation and social adaptation, technologies required for a zero-carbon transition and biodiversity and ecosystems preservation.

Energy supply.

Energy systems and grids.

Buildings and industrial facilities in energy transition.

Environmental observation, including open data and monitoring of biodiversity.

Biodiversity and natural Resources, including terrestrial, freshwater, and marine ecosystems and ecotoxicology of compounds and new pollutants.

Agriculture, forestry, and rural areas, including antimicrobial resistance and agrochemical hazards, as well as digital innovations in farming and forestry such as AI, robotics, precision farming and remote sensing.

Food systems, including healthy diets, personalised nutrition for vulnerable groups, consumer behaviour, and environmental sustainability.

Seas, oceans, and inland waters, including environmental protection, the blue economy, and the role of seas in migration.

Circular systems, including cities and the use of water resources.

Innovation Systems in the EU Bioeconomy, including sustainable biomass sourcing and bio-based materials.