

## Seven strategic cluster domains for smart specialization were identified in Flanders:

- **'Sustainable chemistry'**: cluster domain for the transition in the chemical industry, connected to clusters in plastics, sustainable construction or technical textiles. Innovation will drive new bio-based value chains (enabled by advances in materials sciences, industrial biotechnology). FISCH is possible model for establishing a spearhead cluster for smart specialisations.
- **'Specialised manufacturing solutions'**: cluster domain for customised production in 'factories for the future' ( e.g. niches in specialized components, intelligent textiles, new materials, graphics, urban mining) that emerge thanks to new business models (e.g. for open manufacturing, value-aded logistics, recycling of materials and energy efficiency) and new production technologies (such as mechatronics, 3D printing). The new strategic research centre will be supportive for the modernization of manufacturing.
- **Personalised cure and care**: cluster domain connected to a well-developed health system, an eco-system for clinical trials and a strong pharmaceutical industry, with specific focus domains such as neuro-degenerative diseases and infectious diseases, and new opportunities in molecular diagnostics and other medical technologies. This value-chain is supported by VIB, CMI, Flanders Care.
- **Value-added logistics**: cluster domain with strong connections to specialised industrial value chains in food (frozen products, meat, chocolate) or pharma, and providing specialized services, e.g. for recycling (reverse logistics, urban mining) or the off-shore cluster (maintenance).
- **Specialised agro-food**: cluster domain with diverse value chains in meat, vegetables, fruits that are capitalising on values such as life quality (health and experiences) and the reduction of food waste as competitive advantages.
- **Integrated building-environment-energy cluster**: cluster domain seeking affordable solutions and new ways of housing in smart and sustainable cities (including smart grids and utilities).
- **New ICT-platforms**: cluster domain for hardware and software developments (including embedded systems, based on micro-electronics and photonics) for smart systems and services (including mobile applications, internet of things, e-health or digital media, which are enabling the eco-systems that produce smart specialisations), often in new product-service combinations; also crucial for increasing productivity of service sectors (including public services). This domain is supported by strategic research centres such as IMEC and iMinds.