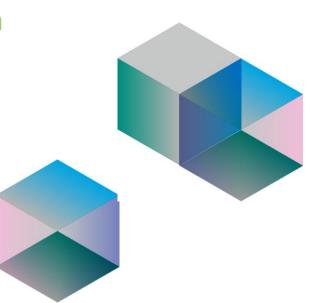


Smart Specialisation Strategy (2021-2027) Consultation

- IDA Ireland Submission



IDA Ireland Submission to the Consultation on Smart Specialisation Strategy.

- With respect to climate action, it will be important that sufficient focus is placed on R&D in, for instance, hydrogen, green ammonia and low power technologies. Hydrogen is a 'natural fit' with wind-based power generation, which has large potential in Ireland, especially in regions with good offshore wind generation potential (e.g. South and Mid West). Surplus renewable wind power can be used to produce hydrogen, which can then be exported and/or used domestically. Research should be undertaken to explore opportunities to reduce the cost of production of hydrogen and to understand its potential and its role in driving climate action and future economic development in Ireland, including regionally. Climate action/sustainability presents huge opportunity for Ireland to be a large scale exporter of renewable energy; however, for this to happen, an appropriate infrastructure, including grid infrastructure, underpinned by an efficient and supportive planning system, needs to be present; for this reason, research, to include benchmarking, needs to be undertaken to map the optimum route and strategy for the country (and appropriate regions) to achieve its (their) renewable energy exporting potential.
- Climate action is a strategic priority nationally, with a very strong focus on decarbonising all facets of economic activity and meeting stringent climate targets. Climate action initiatives should be undertaken with due regard to the following important requirements: 1) energy prices are competitive, 2) there is adequate security of energy supply and 3) enterprise is not unnecessarily overburdened with regulations and obligations. Accordingly, there is merit in research being undertaken that models various possible outcomes and scenarios, identifies potential unintended outcomes, and that a plan is implemented to ensure optimum, sustainable, economic progression (e.g. no power blackouts, no high energy costs or reduced competitiveness).
- Data centres underpin digital-based activity, and they are mostly present in the East of the country (i.e. Dublin); new data centre investment is expected to continue. In this context, it would be beneficial to undertake substantiative research on data centres. This research could include research on 1) improving the power efficiencies of data centres, 2) the use of new technologies to power data centres, 3) the generation of power by data centres themselves, 4) the modelling of data centre growth as it impacts power demand and the identification of ways to meet that growth, 5) optimum demand flexibility options and 6) the balancing effect of data centres on 'intermittent' renewable power generation and utilisation.
- On the tech and digital front, new research should be undertaken in quantum computing, blockchain, HPC, edge computing and DNA-based data storage; the research should encompass fundamental, industrial and experimental research. There should be increased research in cloud-based software, cybersecurity, big data (e.g. analytics and ethics) and AI, with AI, and its role in the digitalisation of enterprise, of particular relevance. There should be more research on the opportunities offered by open data in driving digitalisation.

- Test bedding has traditionally been underutilised in Ireland, but does offer potential, especially if some national test beds can be established (e.g. CAV in the Mid West). More emphasis should be placed on strategic test beds. Clustering will have a role to play in supporting smart specialisation. However to achieve best results, it will be important that supportive clusters are strategically planned, of sufficient scale, not duplicated, and have strong support from a broad range of stakeholders.
- With regard to the Mid West, advanced manufacturing, CAV and tech all have substantial potential. Other growth areas here include agtech, sportstech, aviation and film/creative arts.

