STI Roadmaps for SDGs – paving the pathways for sustainable recovery and future resilience: Australia, Gippsland

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A New Agenda for Global Transformation

- Several projects underpin these comments:
 - A Jean Monnet Network focused on the EU's role in the implementation of the SDGs in Asia Pacific
 - A Jean Monnet Centre of Excellence on Smart Specialisation and Regional Policy which has examined the value of smart specialisation in enhancing regional development,

in Australia and parts of Asia;

A Victorian Government project supporting the application of smart specialisation in Gippsland, a region in the south east of Australia in transition from coalpowered electricity generation.



The Australian STI Priority Framework

- Technology Investment Roadmap a framework to accelerate low-emission technologies (Department of Industry, Science, Energy and Resources): Discussion Paper May 2020, for consultation.
- Australian Government has identified 9 science and research priorities, with associated practical research challenges (Australian Research Council):
 - Food Soil and Water Transport
 - Cybersecurity Energy Health Resources
 - > Advanced Manufacturing Environmental Change
- Innovation and Science Australia –recognises the importance of STI for health, public safety & decarbonising the economy

Gippsland as a peripheral transition region

- Smart Specialisation process introduced in November 2017 following closure of Hazelwood power station by Engie
- Why a peripheral region? Poor socioeconomic indicators, dispersed population, poor transport routes, mining/power concentrated in the Latrobe Valley, but other parts of the region were dominated by various forms of agriculture
- The process followed the S3 Platform Guidelines initially, with significant local adaptation
- Initial focus on STI opportunities but the real challenge has been building the regional innovation system



Social and Science/Technology Innovation

- Why the initial emphasis on social innovation? Challenging grant-driven competitive ethos, building collaboration; separation of industry and research; engaging civil society; demonstrating the importance of data; building capability;
- STI early efforts focused on vegetable waste processing producing nutrients for health markets; possible uses of indigenous grains (also undermine commodity pattern)
- Real STI agenda is emerging in renewable technologies, both massive offshore but also community initiatives to develop TARGET 13-A remote smart grids, smart refuges re bushfires, and new systems for managing agricultural energy usage
- SDGs 13, 12, 2, 3, 6, 16 and 17.



Three Concluding Points

- System-building collaboration is essential for innovation to flourish in achieving the SDGs
- In a peripheral coal-power region facing necessary transition, community engagement with renewable energy sources can lead to significant social and technological innovation
- As the regional capability for collaborative innovation develops, new opportunities for technical innovation emerge across a range of sectors

