



UNCTAD CSTD meeting

**THEME 3: GLOBAL COOPERATION ON SCIENCE,
TECHNOLOGY AND INNOVATION FOR
DEVELOPMENT**

Mario Cervantes, OECD Committee for Scientific and Technological
Policy



Setting the scene: the role of international cooperation in science and technology for development

- The current context
 - The role of collaborative platforms and blended finance partnerships
 - Mobilisation for global public goods
 - Removing barriers
 - Strengthening planning and funding capacities
 - Improving international co-ordination





A reality check: international cooperation in STI in the current economic and geo-political context

- ❑ Derailed post-COVID recoveries and new economic concerns
- ❑ Growing security anxieties and strategic competition
- ❑ Fewer budgetary resources for public R&D , including development research
- ❑ Mitigating and adapting to the climate crisis is increasingly framed in terms of security threats (e.g. supply chains, food, and energy security, migration, etc)
- ❑ Global competition for natural resources, for data and AI, and talent.
- ❑ Competition to regulate emerging technologies leaving developing countries in the “listening room”.



CHIPS and Science Act; T-12, Quad, G7, EU-US Trade and Technology Council, Indo-Pacific Economic Framework for Prosperity



A New Industrial Strategy for Europe; New European Innovation Agenda; Chips Act for Europe



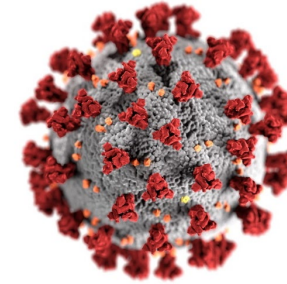
Made in China 2025; 14th Five Year Plan; Dual Circulation; Military-Civil Fusion; China Standards 2035; Belt and Road Initiative

Source: *OECD Science, Technology and Innovation Outlook 2023*,



Are we seeing an increasing 'securitisation' of STI policy?

- ❑ Improving STI preparedness for various global risks, such as pandemics, solar storms, etc., where there's considerable uncertainty of when and how they might happen
- ❑ Using STI to reduce systemic security risks, e.g. to enhance food security, health security, and cybersecurity
- ❑ Managing technological change responsibly to reduce a range of risks, e.g. associated with AI, synthetic biology, and neurotechnology
- ❑ Mitigating and adapting to the climate crisis, which is increasingly framed in terms of security threats
- ❑ Reducing vulnerabilities from trade dependencies in high-tech strategic goods, leading to a push for 'technology sovereignty' and 'open strategic autonomy'





International co-operation in R&D to accelerate research and bring down costs of meeting the SDGs

- ❑ International STI co-operation for the SDGs can accelerate innovation, and enhance economies of scale leading to cost reductions
- ❑ Upstream public R&D co-operation reduces unnecessary duplication and reduces research costs
- ❑ Sharing experience also improves learning among the different actors and generates knowledge spill-overs locally
- ❑ It strengthens incentives for investment and fosters a level playing field through common standards and regulations.



Grand Challenges Canada®
Grands Défis Canada

BOLD IDEAS WITH BIG IMPACT®

SATREPS

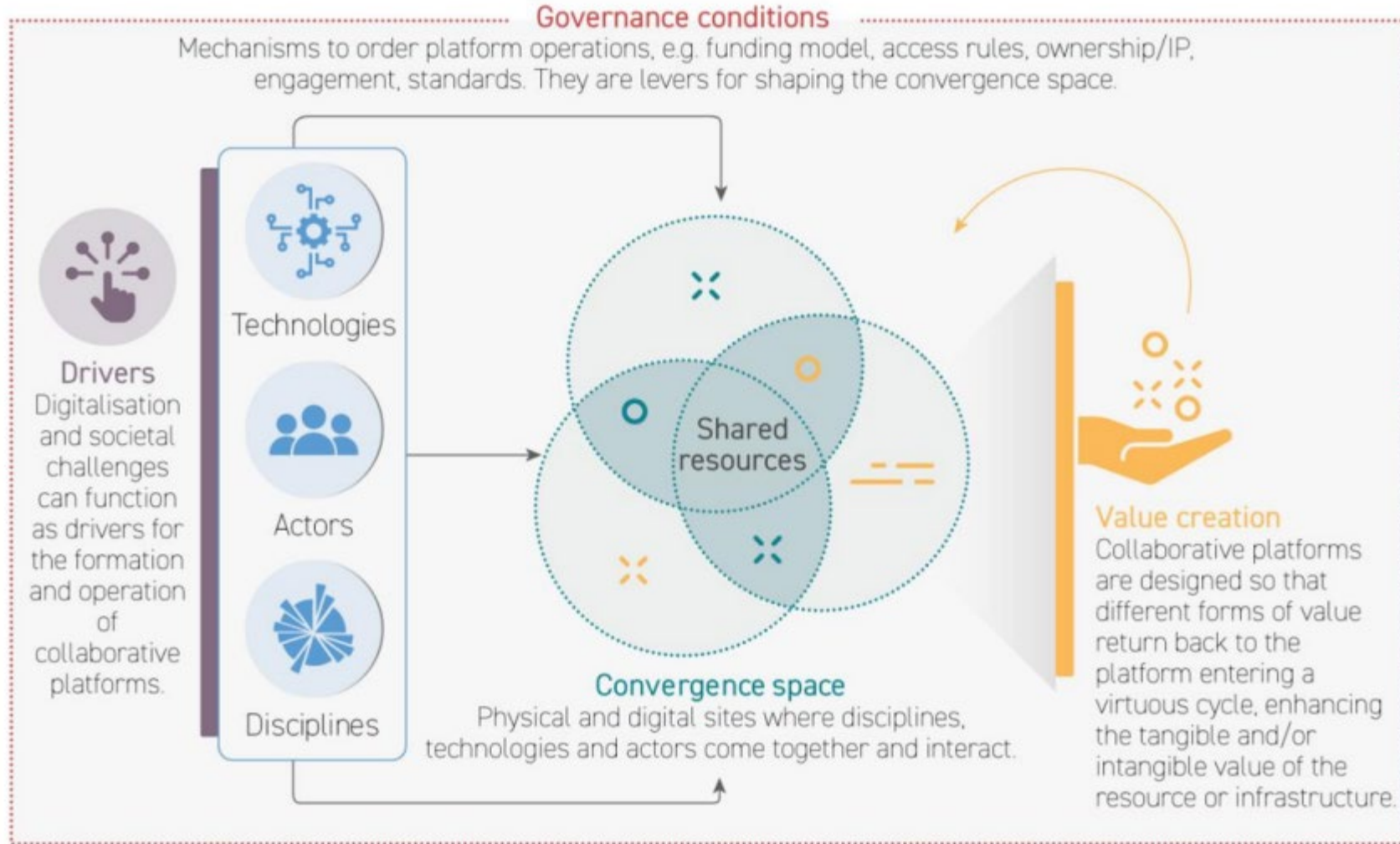


Grand Solutions





Collaborative platforms as convergence spaces for sharing data, IP and funds to de-risk STI investments

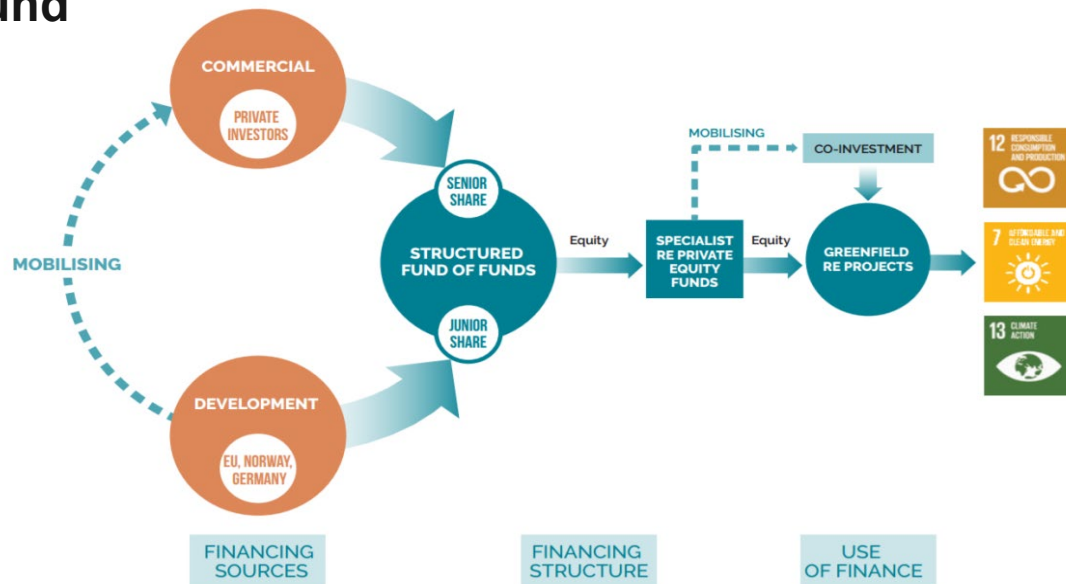




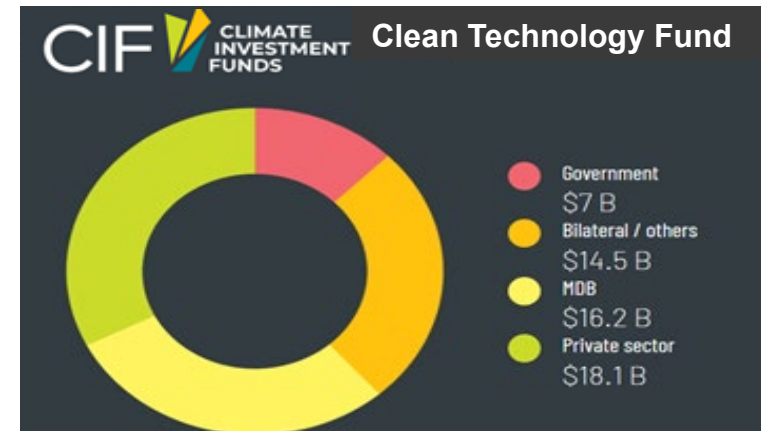
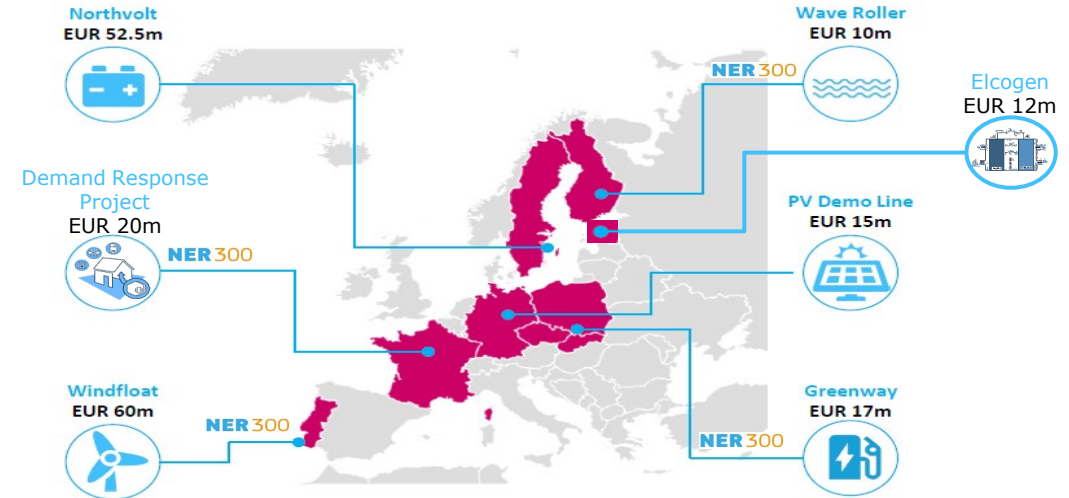
The role of blended finance in crowding private investments for SDGs

- Blended finance can bring much needed private funding to scale up the development and deployment of green tech by reducing the risks (technology and economic) and increasing the returns

Global Energy Efficiency and Renewable Energy Fund



InnovFin Energy Demo Projects





Mobilising innovation for sustainable development: missions beyond borders



- ❑ Building a delivery-focused alliance between countries, businesses, investors, and research institutes to accelerate green innovation
- ❑ 23 countries and the European Commission



- ❑ Delivering impact by putting research and innovation into a new role, combined with new forms of governance and collaboration
- ❑ EU member states, regional and local authorities



- ❑ Accelerating the use of more energy efficient and cleaner technologies and mitigate climate change without undermining economic development (2005 ~ 2011)
- ❑ Australia, Canada, China, India, Japan, Korea, US



Stepping up the efforts: emerging directions from OECD work

- ❑ Better **alignment** of national R&D agendas and linking up national **mission innovation strategies** at regional & international level (e.g. EU, ASEAN)
- ❑ **Transdisciplinary research** is key for the grand challenges/SDGs and promoting this requires **funding and institutional** incentives and skills
- ❑ Linking STI policies more closely to ODA (Official Development Assistance) and focus on **innovation**, not only research.
- ❑ Promote **multi-stakeholder** partnerships with **business**, NGOs and other actors
- ❑ Use innovative financing such as **blended finance** to reduce risks and crowd in private investment for the SDGs
- ❑ Apply “**global public good**” frame to international co-operation in STI .
- ❑ Build up **human resource** capacity in STI through short term north-south and south-south mobility





Stepping up the efforts: emerging directions from OECD work

- ❑ Improving **trust** in international research collaboration through co-design, equitable partnerships;
- ❑ Taking a smart approach by **sharing data among research funders** and **cross-ministerial co-ordination** to reduce fragmentation, exploit synergies
- ❑ More **resources and political attention in the context of 2030 agenda need to be given to** science, technology, and innovation (e.g. beyond the UN STI Forum)
- ❑ Strengthen **capacity of STI planning and research funding councils** in developing countries
- ❑ **International organisations need to step up and have annual co-ordination meetings** with regional actors in STI (ASEAN, ECLAC, AU etc) The **OECD's upcoming STI Ministerial on 23-24 April 2024** offers a unique opportunity to engage IOs and non-members on international STI co-operation.



Thank you !

☐ Contact: mario.cervantes@oecd.org