

How can Green Innovation Contribute to Achieving Sustainable Development?

Presentation to the Panel session at the
WIPO International Conference on Intellectual Property (IP) and Development
– Innovation in Green Technologies for Sustainable Development

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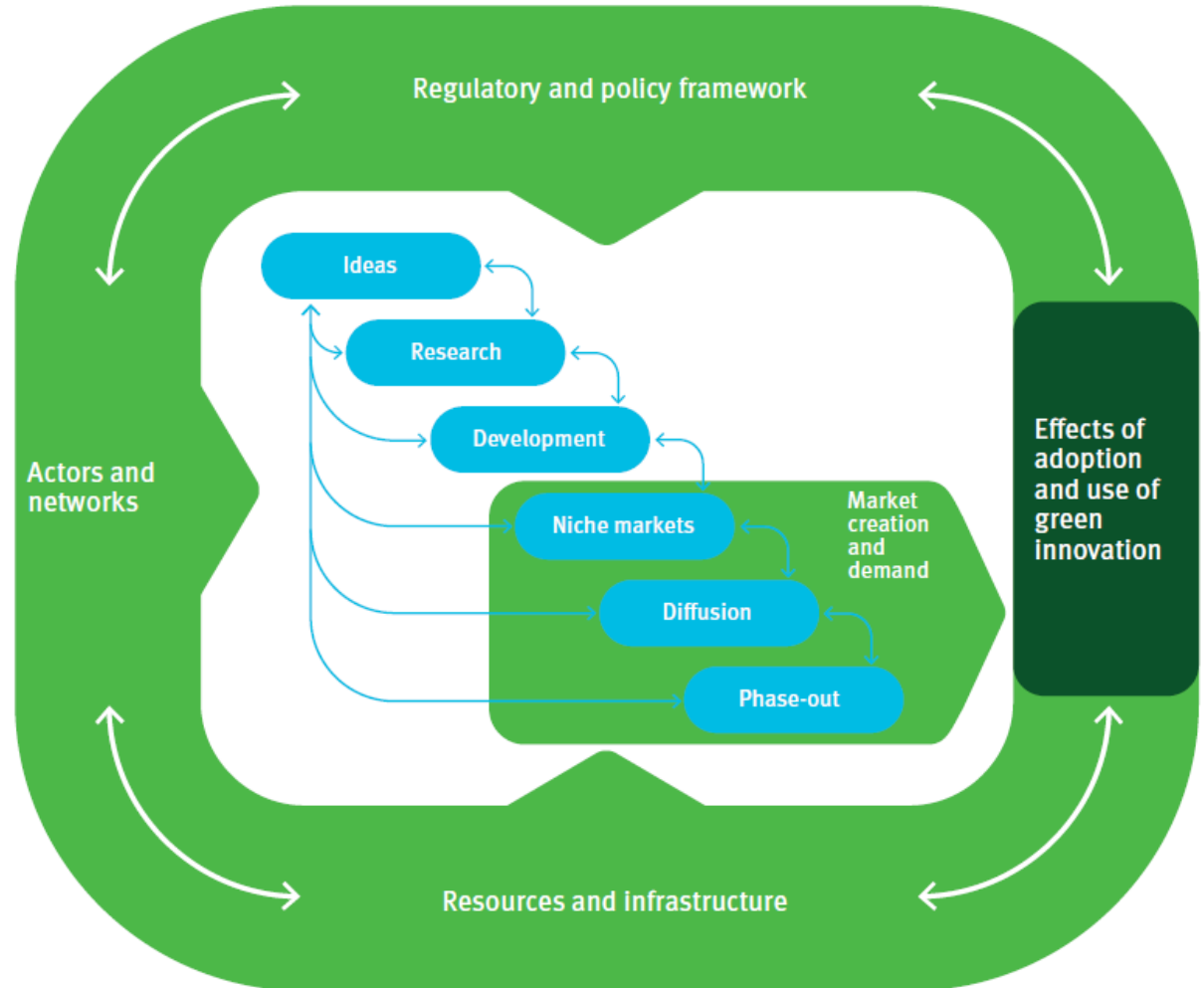
https://www.ucl.ac.uk/bartlett/sustainable/sites/bartlett/files/the_commissions_final_report.pdf

What is Green Innovation?

- **The GIPC defines green innovation as the creation and adoption of new ideas, inventions, practices, processes, products and organisational forms that create value for society and the economy while giving better environmental outcomes and helping meet environmental objectives in line with science-based targets.**

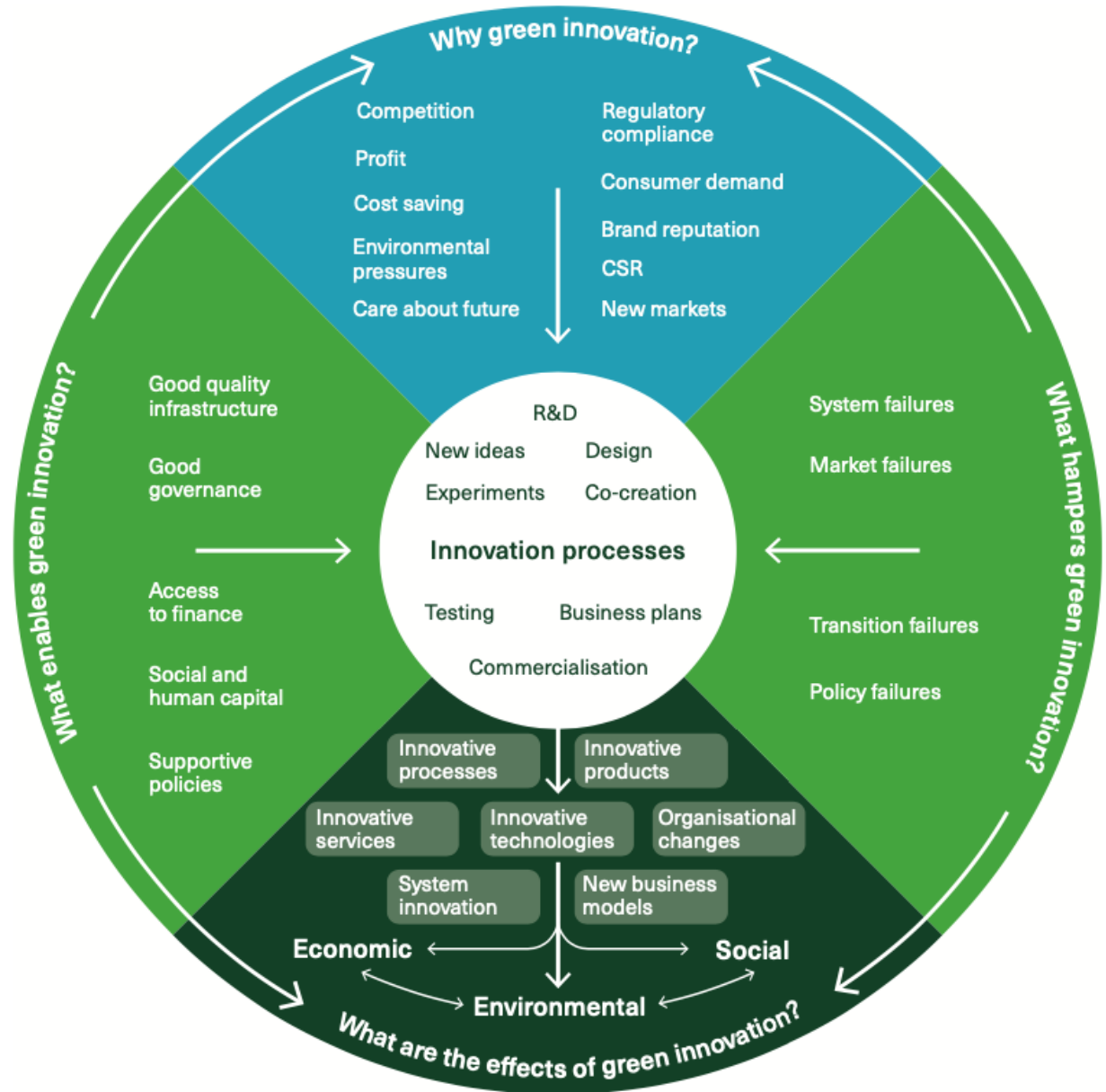
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Getting green solutions to market



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The Green Innovation Wheel



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Hindering factors

- Market failures
- Policy failures
- System failures
- Transition failures

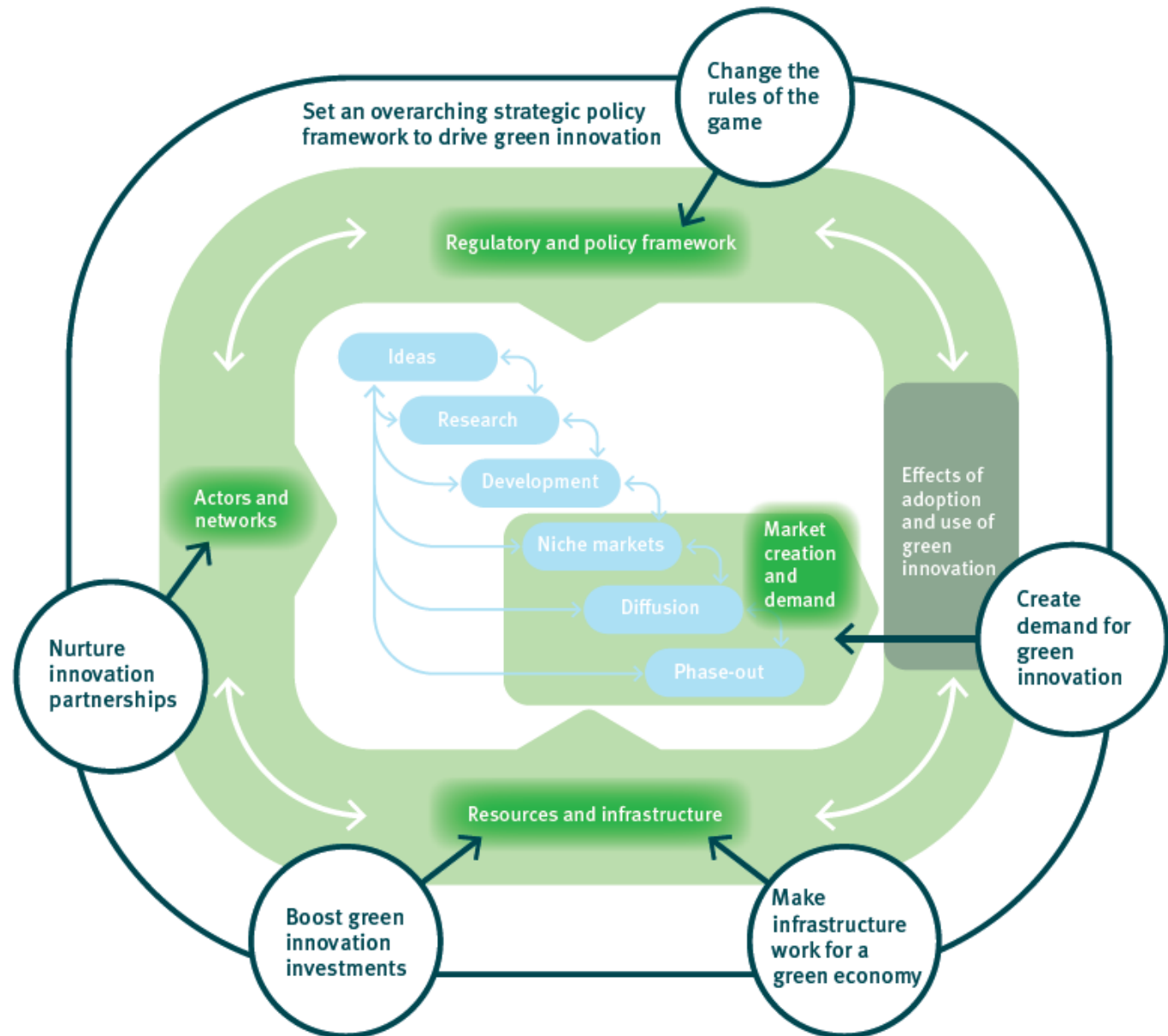
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Enabling factors

- Good quality infrastructure
- Good governance
- Access to finance
- Social and human capital
- Supporting policies

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Six ways to speed up green innovation



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Create demand for green innovation: from niches to global markets

Government should use demand-side instruments to create and scale up market pull for innovative green products and services.

Use fiscal instruments including a strengthened carbon price to foster and reward green innovation

Scale up green public procurement

Bolster pre-commercial procurement of green innovation

Incentivise people to make sustainable consumption choices

Boost green innovation investments: from R&D to innovation diffusion

Public investment in R&D and innovation should prioritise innovations with a potential to foster and accelerate green transformation across Britain.

Establish a well-resourced National Green Investment Fund within the new National Infrastructure Bank to provide patient, long-term finance for green innovation

Prioritise, streamline and scale up public innovation investments which create public value

Rebalance public investments in green innovation from R&D to experimentation and commercialisation

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Change the rules of the game: progressive and agile regulation

Government should align regulations with environmental targets to enforce consistent binding targets, norms and standards across Britain.

Mandate the Regulatory Horizons Council to report specifically on market redesign and regulatory reforms for green innovation

Introduce performance-oriented standards to foster green innovation

Use regulatory sandboxes for green innovation

Nurture green innovation ecosystems: cross-sectoral collaboration and experimentation

Government should support cross-sectoral collaborations and balance R&D and innovation investments to foster green transformation across Britain.

Actively encourage and fund challenge-driven innovation collaborations that span sectors and make full use of the opportunities offered by digitalisation and artificial intelligence

Foster and nurture local and regional innovation ecosystems

Level up regional capabilities and skills for green innovation

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Make infrastructure work for a greener economy: innovative infrastructure

Government should invest in infrastructure to enable and accelerate the transition to a greener and fairer economy.

Make infrastructure planning and investment consistent with environmental objectives

Consider natural assets and green infrastructure a transformational opportunity

Harness the potential of digital and space infrastructure to accelerate green innovation

Working together to foster green recovery: challenge-led policies and governance

Government should build new capabilities and governance mechanisms to become a catalyst of transformative green innovation partnerships.

Establish a Green Innovation and Sustainability Transformation Council

Produce a Green Innovation Policy Roadmap

Work closer with regional and local actors

Provide leadership for global green innovation cooperation

Strengthen monitoring, evaluation and policy learning on green transformation across government.

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Sectoral policy gaps holding up green innovation (1)

Food



Limited demand

Poor visibility of the environmental impacts of different foods and land use practices, and the fact that fiscal incentives do not factor them in, is hindering uptake of more sustainable foods by both supply chain businesses and consumers.

Transport



Poor policy signals for clean tech investment

While there are net zero technologies for some types of vehicle, it is unclear what the alternatives will be to decarbonise heavy goods transport. Despite this, there is limited policy to direct innovation in alternatives for this sector, or to encourage business adoption.

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Sectoral policy gaps holding up green innovation (2)

Construction



Unambitious regulation

Regulation is not driving best practice in building energy use, since it relies on a rating system based on modelled rather than actual performance. It is also failing to reduce whole life carbon, as developers are not required to address the embodied emissions in construction.

Resources and waste



Failure to join up along value chains

Policy has so far focused on end of life solutions for waste management, rather than promoting collaboration between designers, producers and the waste sector to influence better product design and durability, and reduce resource use generally.

Water



Inadequate infrastructure

Sustainable drainage systems should be prioritised in urban environments to minimise flood risk, but there are few measures to ensure they are considered at the earliest stage of new developments. Similarly, hard infrastructure has been prioritised over 'green infrastructure', like ecosystem restoration and river catchment management measures.



Thank you

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