



ECA

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Green investment for economic development in Africa

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Oxford University Economic Recovery Project

@OxEconRecovery



Housed in Oxford's Smith School of Enterprise and the Environment

What we do:



Advise world leaders + decision makers



Track & assess govt spending



Economic modelling



Pursue just transition priorities



Consider how to turn recovery into long-term growth

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@VividEconomics

Strategic economic consultancy with global reach

Emphasis on putting economics to good use

- Founded in 2006
- Team of 100 consultants, working across 60 countries and 6 continents
- Headquartered in London, with offices in the US, Netherlands and South America

Broad experience across sectors and themes

- energy, infrastructure, industry, resources and finance
- themes of climate change, sustainability, growth, competition, innovation and infrastructure planning
- industry leaders in applying economic models and tools

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Sustainable investment will drive sustainable growth



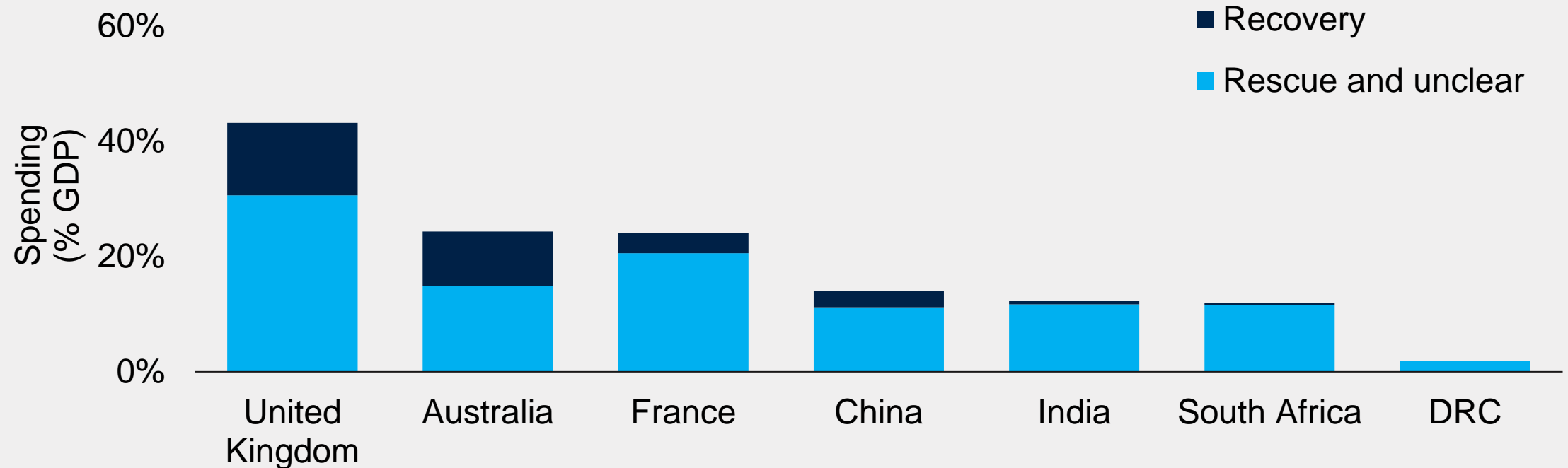
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**Sustainable investment will drive
sustainable growth
&
the international community must
generously partner for the long-term**

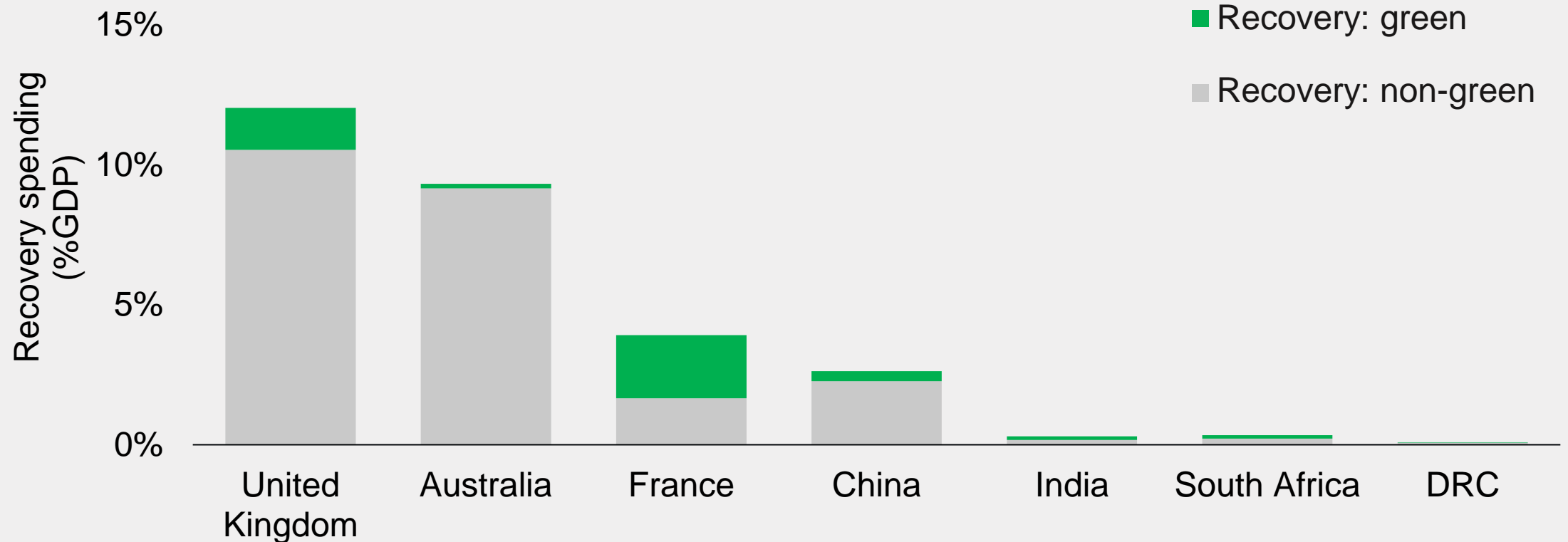
COVID context: Africa has been spending

Essential terminology

- Short-term rescue: keeping businesses and people alive
- Long-term recovery: reinvigorating the economy

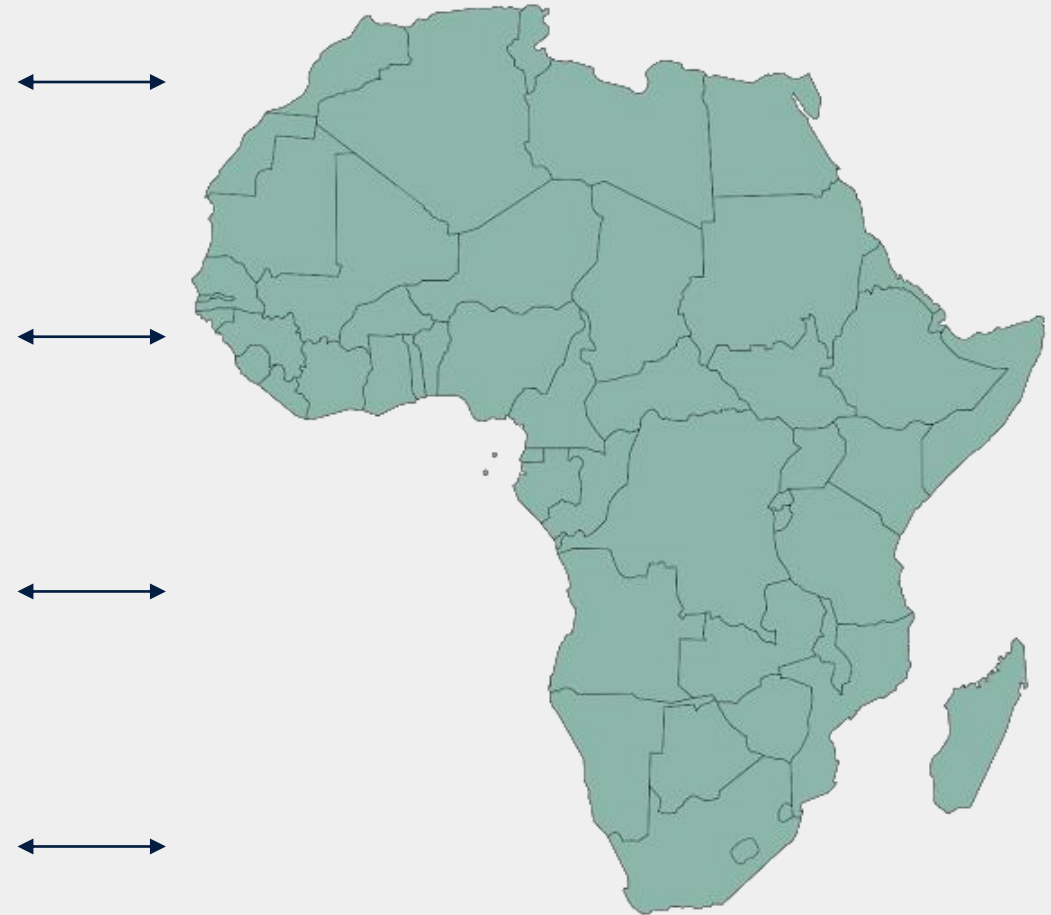
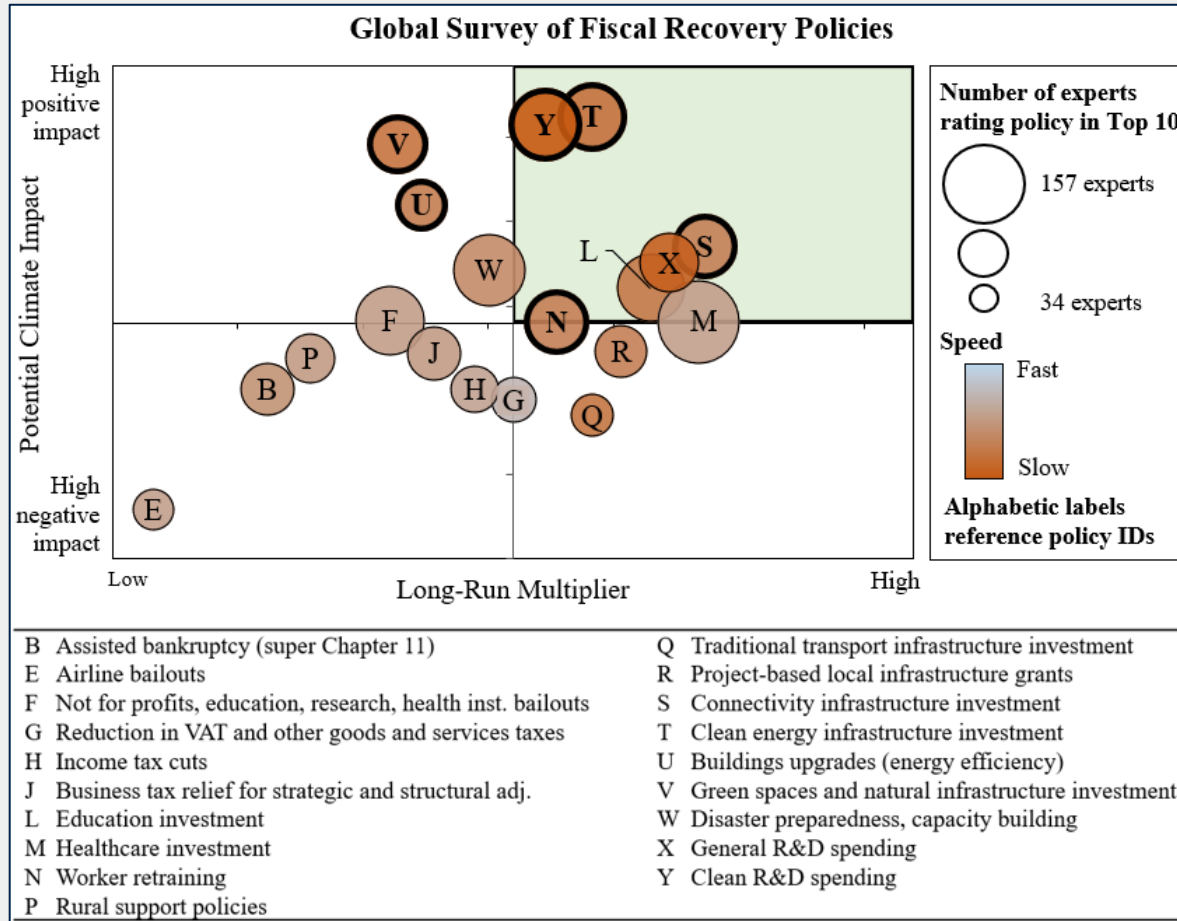


But Africa does not have the freedom to cheaply spend on recovery...



Post-covid, is green good for Africa?

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Key paper: Will COVID-19 fiscal recovery packages accelerate or retard progress on climate change? Cameron Hepburn, Brian O’Callaghan, Nicholas Stern, Joseph Stiglitz, Dimitri Zenghelis, *Oxford Review of Economic Policy*, Volume 36, Issue Supplement_1, 2020, Pages S359–S381, <https://doi.org/10.1093/oxrep/graa015>

Our study shows green investment could rebound growth, expedite development, and bring environmental benefits



Republic of South Africa



Renewable energy



Low-emissions transport



Natural capital investments

Democratic Republic of the Congo



Utility-scale Renewable Energy & Power Lines



Minigrids and Microgrids



Natural capital investments

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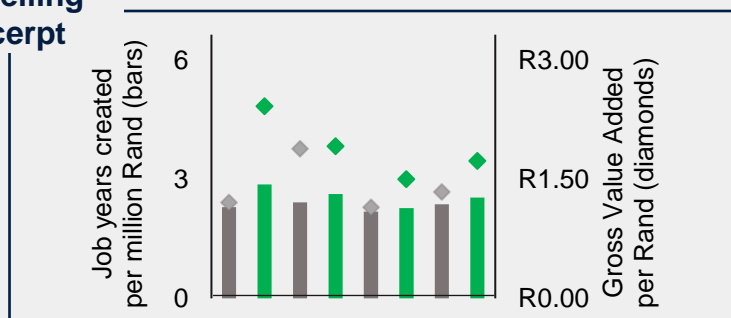


Low-emissions transport



Natural capital investments

Modelling excerpt



Democratic Republic of the Congo



Utility-scale Renewable Energy & Power Lines

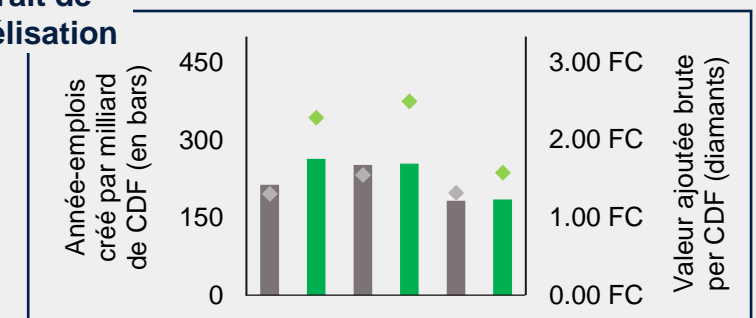


Minigrids and Microgrids



Natural capital investments

Extrait de modélisation





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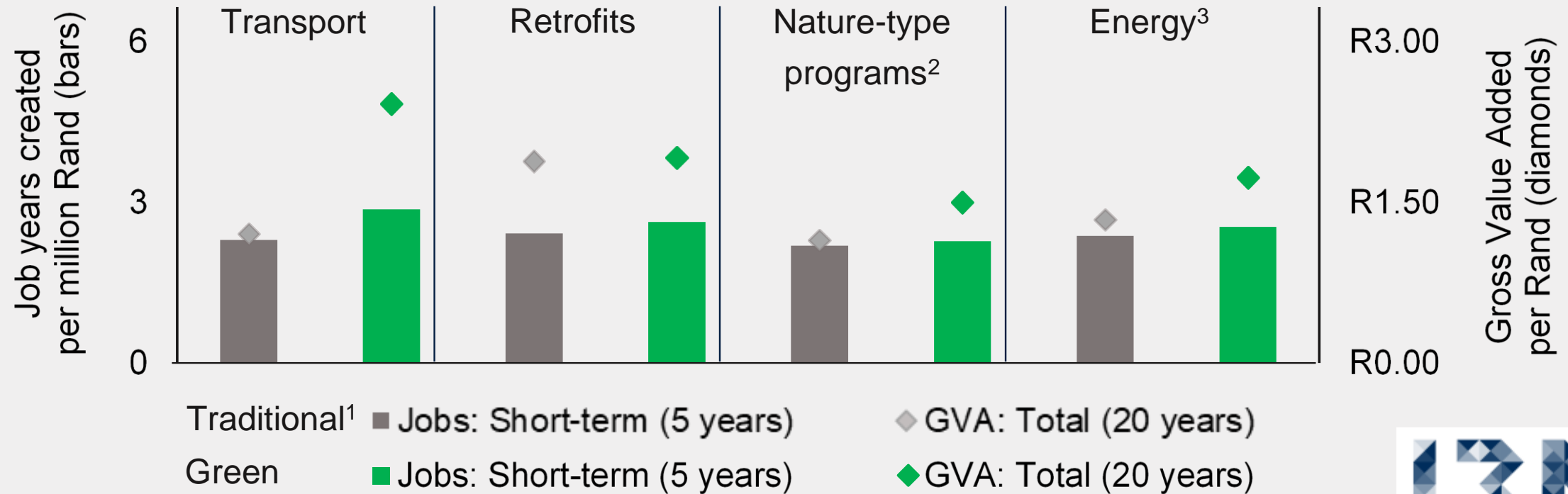
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Across four sectors, Vivid modelling shows selected green policies deliver greater short-term jobs & long-term output



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Job and Gross Value Added (GVA) impacts of green spending policies (average) compared to traditional spending in South Africa.

1 Traditional investments include road, housing development, water treatment facilities, and coal energy generation. 2 Green nature includes agroforestry and park development, among others (figure 4). 3 Modelling is based on current sector dynamics, rather than projected future dynamics. It is likely to overstate long-term GVA of traditional (fossil) investment and understate GVA of green energy. For fossil spending, stranded asset risk could reduce asset lifespans. For clean investment, cheaper energy is likely to unlock investment in electric transport, sustainable production, and other adjacent sectors.



Policy options include investments in sectors which can alter the sustainability of growth going forward, delivering both jobs + environmental benefits



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Renewable energy

- high economic multipliers
- reduce vulnerability to fossil fuel price volatility
- enables broader economic growth
- investing in traditional fossil fuel energy risks creating stranded assets, reducing returns



Natural Capital Investments

- includes restoration of habitats, agricultural interventions, and urban greening.
- quick to deploy, low training requirements
- builds climate resilience and productivity
- low leakage outside of the country
- returns for the tourism sector



Low emissions transport

- strong job creation in research and up the supply chain for electric vehicles
- public transport systems, for example BRTs or electric buses, create jobs in construction and operation, while supporting connectivity and agglomeration economies



Building retrofitting

- small scale investments include solar roofs, insulation and window and door retrofitting
- commercial and residential energy retrofitting support construction and trade jobs, while reducing building energy needs
- supports upstream suppliers

Further modelling in DRC reveal similar messages: recovery spending can support jobs + growth while lowering emissions + protect nature



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Much of global stimulus spending will likely be directed towards investment in long-lived assets, which will impact the environment for years to come and alter the productivity capacity of national economies.

- Investing in transport and energy systems enhance the productive potential of other industries, and unlock opportunities in green tech through creating a critical scale of demand
- Investing in traditional technologies today risks creating stranded assets in the future – e.g. power stations that have lower future economic value as the energy transition takes hold
- Natural assets such as forests and mangroves may enhance the wealth of economies in the coming decades as carbon sinks valued by global offsets markets, as protectors of biodiversity, as sources of increased tourism revenues, and as the lungs reducing pollution and enhancing well-being – investing in these today can create jobs & build long-term wealth

The economic modelling is based on current technology and pricing, and therefore likely underplays the scale of the long-term opportunities green policies unleash.



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Green investment could bring more jobs and economic gains in the short term, unlock greater development opportunities in the medium to long term, and ensure better environmental and social outcomes

Excerpt from report: *A Prosperous Green Recovery for South Africa*