

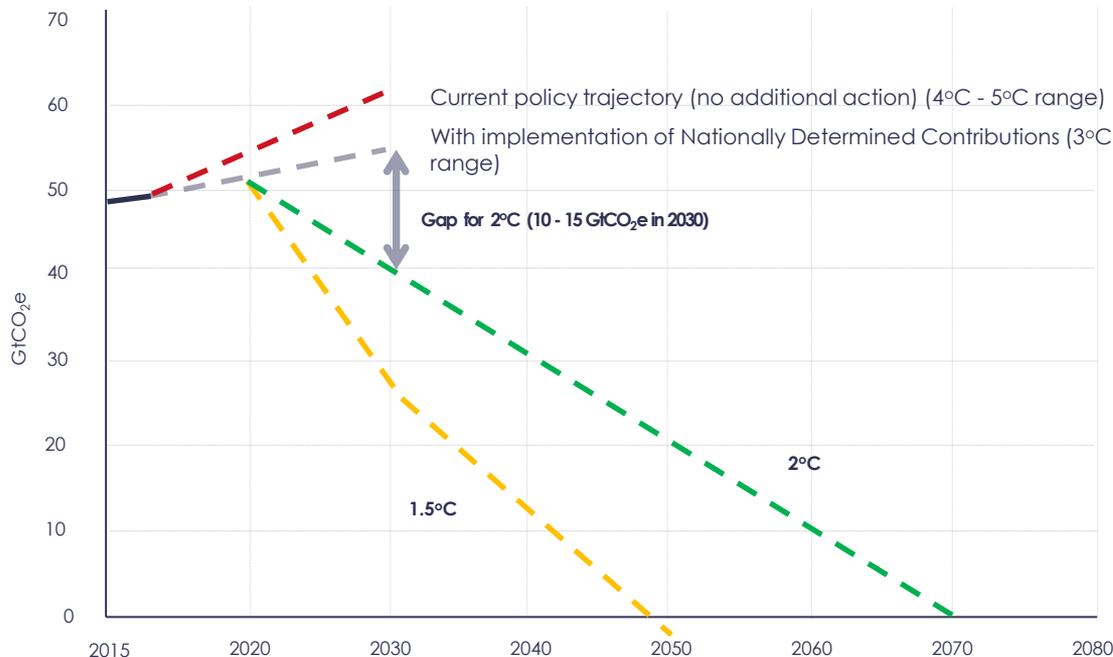
Unlocking the inclusive growth story of the 21st century

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Currently a large gap between current COP21 NDCs and what is required to reach the Paris temperature targets



Source: Stylised trajectories based on UNEP (2018)

The challenge is now to accelerate action to 2030 to close the gap. Requires immediate action across whole economy. Must peak emissions in next few years and go to “net zero” in next 50-60 years.

Urgency of the next decades, decisions made now are critical in establishing low-carbon development, growth, inclusion and poverty reduction

Change in the next decades

15 years Infrastructure  ↑ 2x Investment of approximately US\$ 90 trillion.

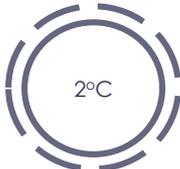
20 years GDP  ↑ 2x Growth of approximately 3% per annum. Led by emerging and developing countries.

40 years Urban Population  ↑ 2x Urban population will double in 40 years, Towns and cities shaped in the next 20.

At the same time (to meet Paris targets)

 ↓ ~50% Decrease GHG emissions from ~50 to ~25 Gt CO₂e by 2030

or

 ↓ ~20% Decrease GHG emissions from ~50 to ~40 Gt CO₂e by 2030

Choices made on infrastructure and capital now will either lock us in to high emissions, or set us on a low-carbon growth path which can be sustainable and inclusive. Cities are central

Strong investment in sustainable infrastructure is at the core of meeting the global agenda and supporting social inclusion



Well-designed infrastructure can be pro-growth, pro-poor, and pro-climate

The growth story of the 21st century is strong, sustainable, and inclusive

5 - 10 years



Investment in sustainable infrastructure can boost shorter-run demand and growth, sharpen supply, reduce poverty and support sustainable development.

>10 years



Spur innovation, creativity and growth in the medium term, unleash new waves of innovation and discovery.

>20 years



Low-carbon is the only feasible longer-run growth on offer; high carbon growth self destructs.

The next 10-15 years are a unique “use it or lose it” moment. Seizing the benefits will only be possible if we act boldly over the next 2-3 years.

We have in our hands a new and very attractive way forward, the inclusive growth story of the 21st century.

Three forces present us with a special opportunity to deliver on the global agenda and seize the growth opportunities

%

Historically **low interest rates and no shortage of global savings.**
Search for growth.



Rapid technological change and falls in cost
(digital, materials, biotech...)



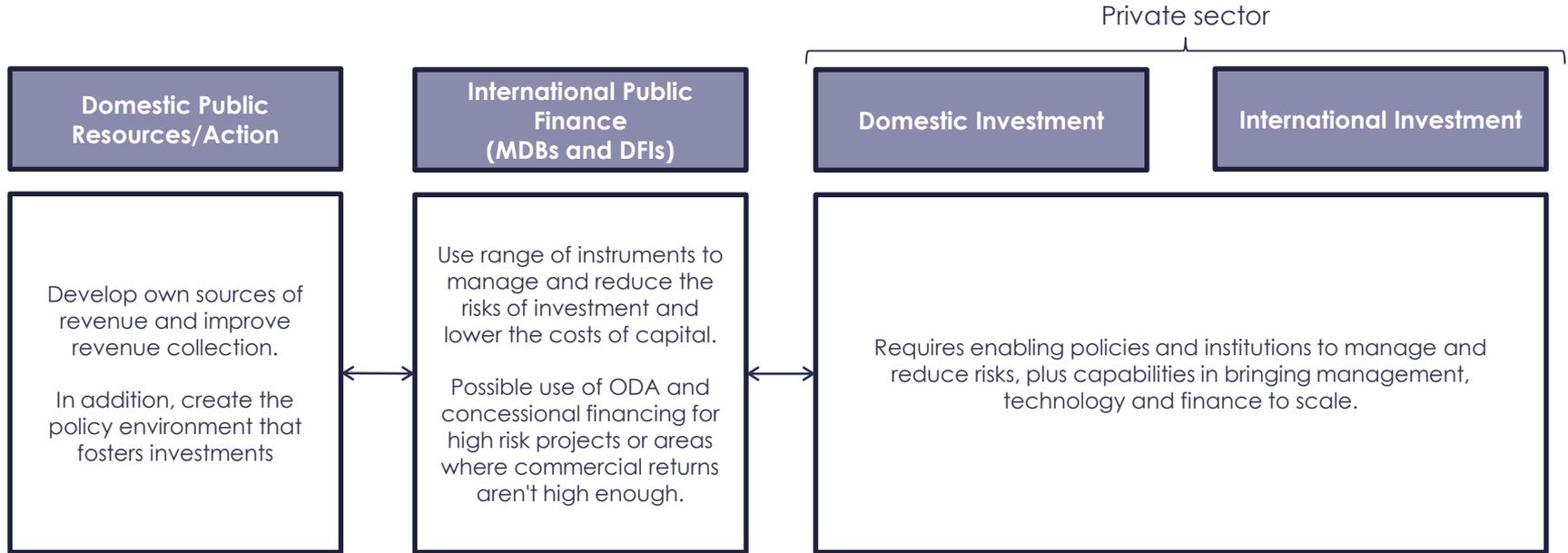
International agreements have **provided political direction** and evidence that collaboration is possible and will continue

The notion of “costs of action” are also being transformed by rapid technological advances and cost reductions

Seizing the opportunity requires a radical change. Most of what we currently do will have to be done differently (technologies, institutions, business models, city planning processes, natural resource management...)

Dangers of lock-in of high emissions if we lost the moment.

Mobilizing the required capital for sustainable investment requires a number of sources to work together



Given the scale of investment requirements for sustainable infrastructure, and development more generally, a significant scaling up of financing is needed from all sources—domestic public, international, private—and the links between them made stronger.

Quality and quantity of investment and the shape of the transition will be determined by sound policy and government direction

Market Failure	Description	Policy Options
Greenhouse gasses (GHGs)	Negative externality because of the damage that emissions inflict on others.	Carbon tax/ cap-and-trade/ regulation of GHG emissions (standards)
Research, development and deployment (R,D&D)	Supporting innovation and dissemination.	Tax breaks, support for demonstration/deployment, publicly funded research.
Imperfection in risk/capital markets	Imperfect information assessment of risks; understanding of new projects/technologies.	Risk sharing/reduction through guarantees, long-term contracts; convening power for co-financing.
Networks	Coordination of multiple supporting networks and systems.	Investment in infrastructure to support integration of new technologies in electricity grids, public transport, broadband, recycling. Planning of cities.
Information	Lack of awareness of technologies, actions or support.	Labelling and information requirements on cars, domestic appliances, products more generally; awareness of options
Co-benefits	Consideration of benefits beyond market rewards.	Valuing ecosystems and biodiversity, recognising impacts on health

Different market failures point to the use of different instruments, but the collection should be mutually reinforcing.

Government-induced policy risk is the biggest deterrent to investment worldwide. Policies must be credible over time; 'predictably flexible'

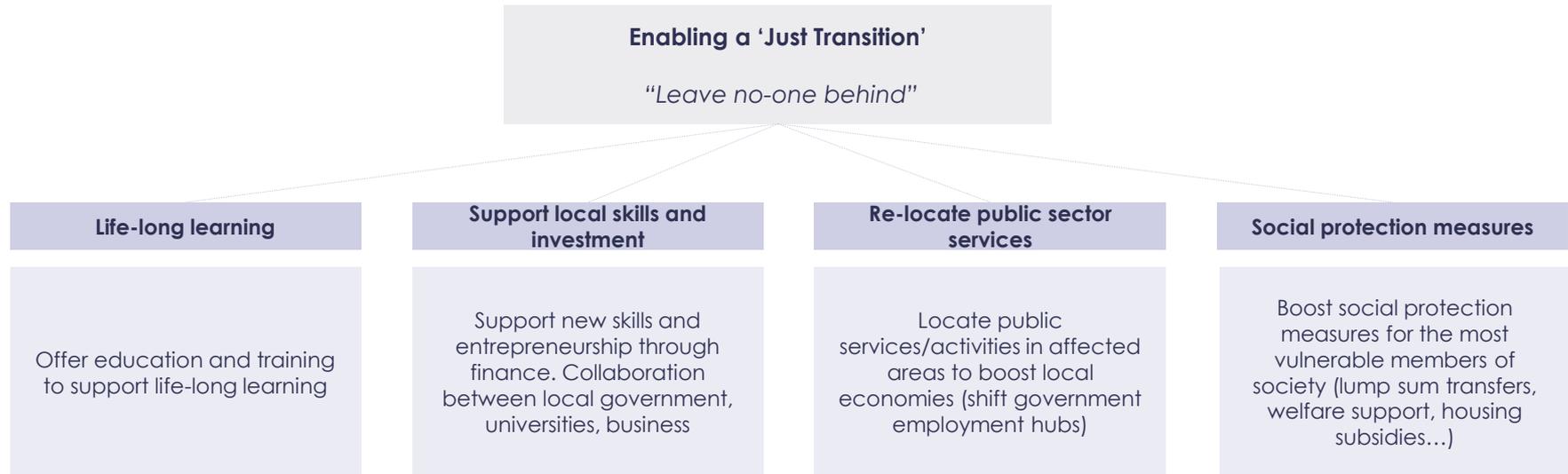
Carbon pricing revenues should play a key role to support the transition

Option	Description
General government budget	Provide additional revenue for government policy priorities (e.g. education, health, security, social benefits...)
Revenue neutral-households	Used to reduce burdens for households/consumers through reducing income taxes, sales taxes or direct returns of revenue (including lump-sum transfers).
Revenue neutral – firms	Reduce costs for firms exposed to price effects, for example support for emission-intensive sectors or trade exposed firms (e.g. grandfathering, free tax allowances) or provide support for firm activities (e.g. energy efficiency, new technology, process improvements...)
Allocation for 'green' purposes	<ul style="list-style-type: none">• Finance 'green' initiatives, e.g. recycling/re-using; land rehabilitation; housing retrofits etc.• Support for research and development• Investment in sustainable infrastructure (e.g. public transport, renewable energy), including programme design, project preparation and risk management.
Support for developing countries	Provide additional support for developing countries to finance sustainable development (SDGs) and climate action (Paris Agreement). Could be via either bi-lateral development institutions or multilateral development banks (MDBs). See High-level Panel on Climate Change Finance (2010).

Prices should reflect costs; not pricing something that is damaging is a subsidy. Potential for carbon border adjustments if pollution remains unpriced.

Potential to utilise a mix of revenue-use options to promote a mixture of policy goals and objectives.

How the zero-carbon transition is managed will be central to building the consensus for strong, sustainable action



A 'just transition' is about more than just managing a zero-carbon transition, there are other large changes in economic structures: shift to services, labour-saving technologies, globalisation... all have to be managed together. The global financial crisis has made the problem more severe.

Actions in five key sectors can unlock the investment, growth and sustainable development opportunities. The rewards are substantial.

Energy

- Raising revenue by pricing carbon and eliminating fossil fuel subsidies
- Saving energy through greater energy productivity
- Supporting energy access through distributed renewable energy

Cities

- Well managed densification to revitalise cities
- Sustainable and affordable housing for urban poor
- Shared, electric, low carbon transport

Food and land use

- Avoiding deforestation and degradation of forests
- Scaling up landscape restoration
- Implementing climate-smart agricultural approaches
- Supporting better food consumption patterns and reducing waste

Water

- Sustainable and equitable water allocation
- Target investment in resilient water and sanitation infrastructure

Industry, Innovation and Transport

- Focus on energy efficiency, resource efficiency, and decarbonisation in heavy industry
- Reduce emissions from the plastics value chain
- Develop low-carbon solutions for heavy-duty transport
- Increased support for innovation and deployment

By 2030



Generate over **65 million** additional low-carbon jobs



Make available **US\$ 2.8 trillion** from carbon pricing revenues and removing fossil fuel subsidies



Avoid **700,000** premature deaths from air pollution

Source: New Climate Economy, 2018