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Advancing the MDB climate agenda

contributing to the implementation the Paris Agreement

Innvation4Climate

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24 May 2018

Advancing the MDB Climate Agenda

- Partners
  - NewClimate Institute
  - Germanwatch
  - World Resources Institute
  - Fundacíon Avina
- Topics
  - NDCs and long-term planning
  - Alignment with Paris temperature goals
  - Adaptation finance and mainstreaming of climate risk

Paris Agreement Article 2

- *Holding the increase in the global average temperature to **well below 2 °C above pre-industrial levels** and to pursue efforts to **limit the temperature increase to 1.5 °C above pre-industrial levels***
- *Increasing the ability to adapt to the adverse impacts of climate change and foster climate resilience and low greenhouse gas emissions development, in a manner that does not threaten food production*
- ***Making finance flows consistent with a pathway towards low greenhouse gas emissions and climate-resilient development***

IFI Principles for Climate Mainstreaming

5 voluntary Principles for Mainstreaming Climate Action:

- COMMIT to climate strategies
- MANAGE climate risks
- PROMOTE climate smart objectives
- IMPROVE climate performance
- ACCOUNT for your climate action

Paris Agreement Article 2

- "*We recall the objective to align finance flows with the goals of the Paris Agreement*."

  -G20 Hamburg Climate and Energy Action Plan for Growth

Three project elements:

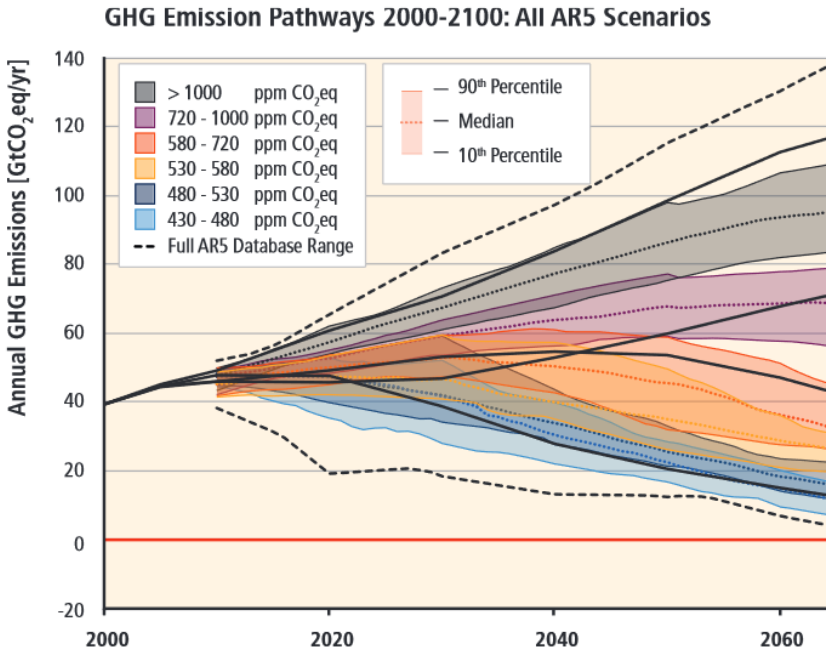
1: MDBs role in supporting NDC and LTS implementation

2: tools and approaches for 1.5/2 C investment decision-making

3: Strengthening action on adaptation and resilience

Why do we need Paris compatible investment criteria?

- Paris requires step change in investments towards zero emissions
- Annual investments in clean energy need to quadruple to USD 1 trillion per year until 2030
- Investment decisions may lock in greenhouse gas emissions for decades and or end up as stranded assets

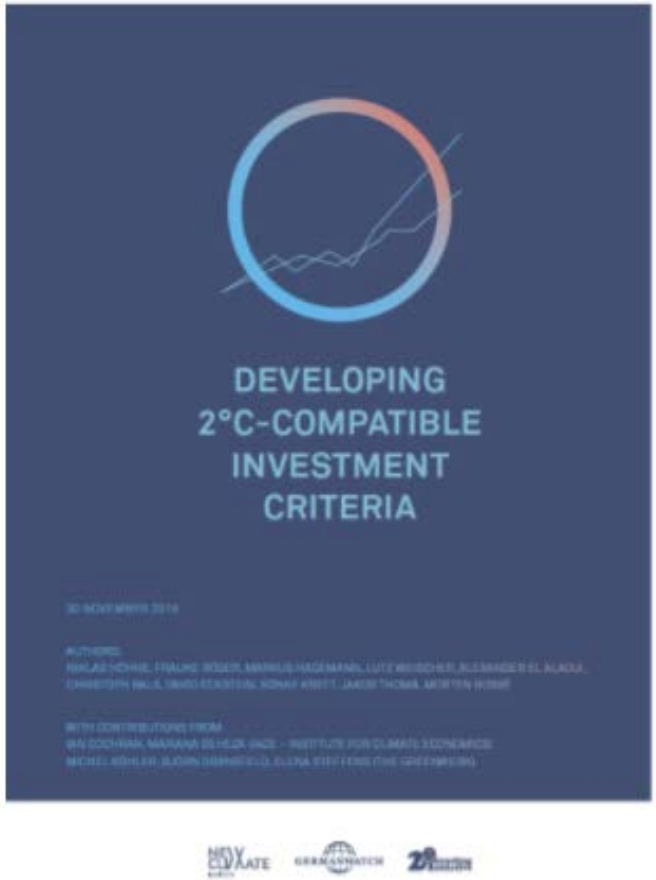


- Finance institutions often incorporate climate into their investment decisions but rarely link these to Paris Agreement science

Builds on previous investing criteria work

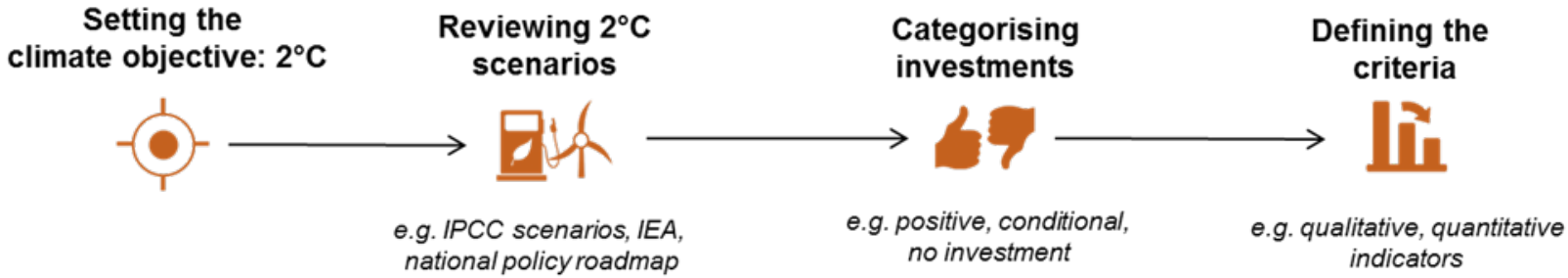
Key findings:

- The majority of IFIs integrate climate considerations into their finance decisions to some degree:
  - Positive and negative lists, qualitative and quantitative benchmarks, shadow carbon pricing
- But: *lack of link to overall temperature targets*
- Developed investment criteria for electricity generation, transport infrastructure and buildings sectors
- General criteria for some investments – others need more contextual decision making



2015

Approach



- Challenge: translate global goal to individual project/ entity
- Systematic review of different 2°C scenarios to determine where investments should/ shouldn‘t flow
- Aspects considered:
  - Contribution to emission reduction //
  - Value of future investment //
  - Asset lock in (pos/ neg)
  - Regional hot spots
- Categorise investments based on consistency across scenarios

Investment Categorisation

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2°C compatible	Conditional	Ambiguous	Misaligned
Fully aligned with 2°C consistently across all scenarios	2°C aligned only under certain conditions in all scenarios	2°C aligned in some scenarios, but not in others	Consistently misaligned with 2°C in all scenarios
	• Due to the fact that multiple pathways can lead to 2°C (e.g. more renewables and less efficiency or the other way around) • Due to different assumptions on technological development • Due to considerations of other sustainability factors		
• Renewable energy • Energy storage • Low carbon transport fuel infrastructure • Electrified transport	• **Gas fired power plants** • Energy transmission and distribution infrastructure • **Energy efficiency in heating and cooling of buildings** • Efficiency in industry • **Transport infrastructure** • Transport efficiency • Agriculture and forestry • Building appliances	• Biofuels • Fossil fuel production • Large hydropower • Bio energy carbon capture and storage • Nuclear	• New coal fired power plants with unabated emissions

Based on a comprehensive review of 2°C compatible model scenarios, including scenarios from Integrated Assessment Models (e.g. as in IPCC report), energy sector models (e.g. IEA), renewables and efficiency scenarios and sector specific scenarios.

2°C for the power sector

2°C compatible Positive list	Conditional Qualitative/ quantitative conditions		Misaligned Negative list
Energy source: Wind PV Small hydro	Energy source: e.g. natural gas **Shadow economic price of carbon**	Energy source: e.g. natural gas **Decarbonisation based approach** *Simple*: Prove that project fits into a path towards 0 gCO2/kWh in 2050 *Advanced*: Prove that the project fits into a national sector-based decarbonisation strategy including lifetime, operation mode and capacity requirements	Energy source: New coal fired power plants with unabated emissions over their lifetime

Key Findings

- 2°C investment criteria for individual projects …
  - Can generally be developed from scenarios
  - Have to be sector specific – easier for some sectors than others
- Country context is important to reflect
  - Market conditions and maturity
  - Systemic nature of many technologies
- Transition approach may be needed to achieve 2°C compatibility over time

Plans for this project part 2

- **Objective: Develop criteria further and develop tools that can be used by MDBs in decision making**
- Steps:
  - Identify focus sectors (review of portfolios and investment needs)
  - Update previous work from 2° compatible to „Paris compatible“
  - Apply criteria/ tools to real cases, in consultation with selected MDBs
  - Feed findings back into criteria and tool development
- Possible outcomes/tools:
  - Calculation tools to generate country specific results
  - Flowcharts/decision trees
  - Lists of detailed investments in different categories
  - Guidance for developing project pipelines
  - Data needs: guidance on what data should be collected

Energy Infrastructure

- Electricity transmission/storage infrastructure/smart grids
- Natural gas (generation, pipelines, production)

Transport Infrastructure

- **Mainstreaming avoid and shift (A & S)**
- **Promoting mobility through systems thinking**
  - Urban/regional passenger
  - Urban/regional freight
  - Long distance passenger
  - long distance freight

Ongoing work

- Portfolio / process examination for current work
- Update of „scenario analysis“ to identify changes between 2°C compatibility and Paris compatibility
  - What does latest climate science IAMs, IPCC reports mean for investments?
    - Faster deployment of renewables;
    - Shorter window for gas as bridge technology;
    - Scenarios do not always have sectoral detail, e.g. transport.
- Selection of projects as trial
- Development of quantitative and qualitative tools

How this work can help MDBs

- Aligns with MDB intention to ensure standards, processes and methodologies remain at the forefront of climate change considerations;
- Insights in technical work on definition of Paris compatibility
- Ideas on integration of criteria in banks‘ processes
- Providing concrete tools available to use/adapt
- Help identify/develop future possible project pipelines

Thank you for your attention!!

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- About NewClimate Institute
  - Non-profit research institute founded Nov. 2014
  - Offices in Berlin and Cologne
  - Areas of expertise
    - Climate negotiations
    - Tracking climate action
    - Climate and development
    - Climate financing
    - Carbon markets

Related activities in the area

- Climate Bonds Initiative
  - Certify 2°C compatible bonds
- 2° Investing Initiative
  - E.g. Sustainable Energy Investment (SEI) metrics project
- Science Based Targets Initiative
  - Develop joint methodologies to set company targets, also for financial sector
- Carbonne 4
  - Develop/apply methodology to rellocate and build portfolio to maximize contribution to climate transition.
- CDP ACT
  - Platform for disclosing climate data for cities and companies
- Carbon Tracker
  - Focus on energy sector, applies carbon budget and associated carbon shadow price to identify likely stranded assests