

# CLIMATE RISK & GREEN TRANSITION

## ROUNDTABLE II: DESIGNING AND USING CLIMATE MACRO-FINANCIAL SCENARIOS

STFS

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**BNP PARIBAS**

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# Different uses of climate scenarios

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- **Use of climate scenarios in 2 distinct frameworks serving different purposes**
  - Portfolio alignment driving the adaptation of commercial strategies
  - Identification / measurement of credit risks associated with specific, possible climate trajectories
  
- Yet these frameworks are not totally disconnected as they share common inputs or constituents, hence **they will likely inform each other in the future**
  - Credit exposures - today and dynamic balance sheet
  - Data sources and typology
  - Client-level inputs such as transition plans
  - Reference scenarios (NGFS versus IEA, NZE versus SDS)
  
- Hence the question about possible **coherence / convergence in the underlying assumptions**
  - Minimisation of differences to reduce the risk of communicating on conflicting information
  - **Selection of appropriate scenario(s) in view of context and objectives**



# Significant differences between NZE 2050 (IEA) and NZE NGFS

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- ❑ Whilst both scenarios manage to keep warming below 1.5°C by 2100 (50% probability), the NGFS does not fully achieve net zero by 2050
- ❑ In its NZE 2050, the IEA assumes significant technological innovation, especially beyond 2030 (including mitigation strategies)
- ❑ The IEA assumes no new investments into coal power plants and no new investments in fossil fuels (coal + O&G) from 2021 onwards + phase-out of unabated coal power globally by 2030
- ❑ There are fundamental differences in the definition of the carbon price, leading to significant differences in levels over the next 30 years
  - Defined as the marginal abatement cost of an incremental GHG tonne by the NGFS (proxy for overall policy intensity)
  - Includes auxiliary emission reduction measures in the IEA approach
  - Differences in granularity (regions, sectors)
  - As a result, carbon price cannot be directly compared in both scenarios
- ❑ The IEA considers CCUS (carbon capture, utilization and storage) where the NGFS considers CCS (carbon capture and storage)
- ❑ Higher contribution of nuclear in the IEA scenario
- ❑ Differences noted in granularity (e.g. the IEA differentiates between auto, shipping, aviation, etc. where the NGFS mostly focuses on transportation)

