

# Criteria for Paris-aligned investing

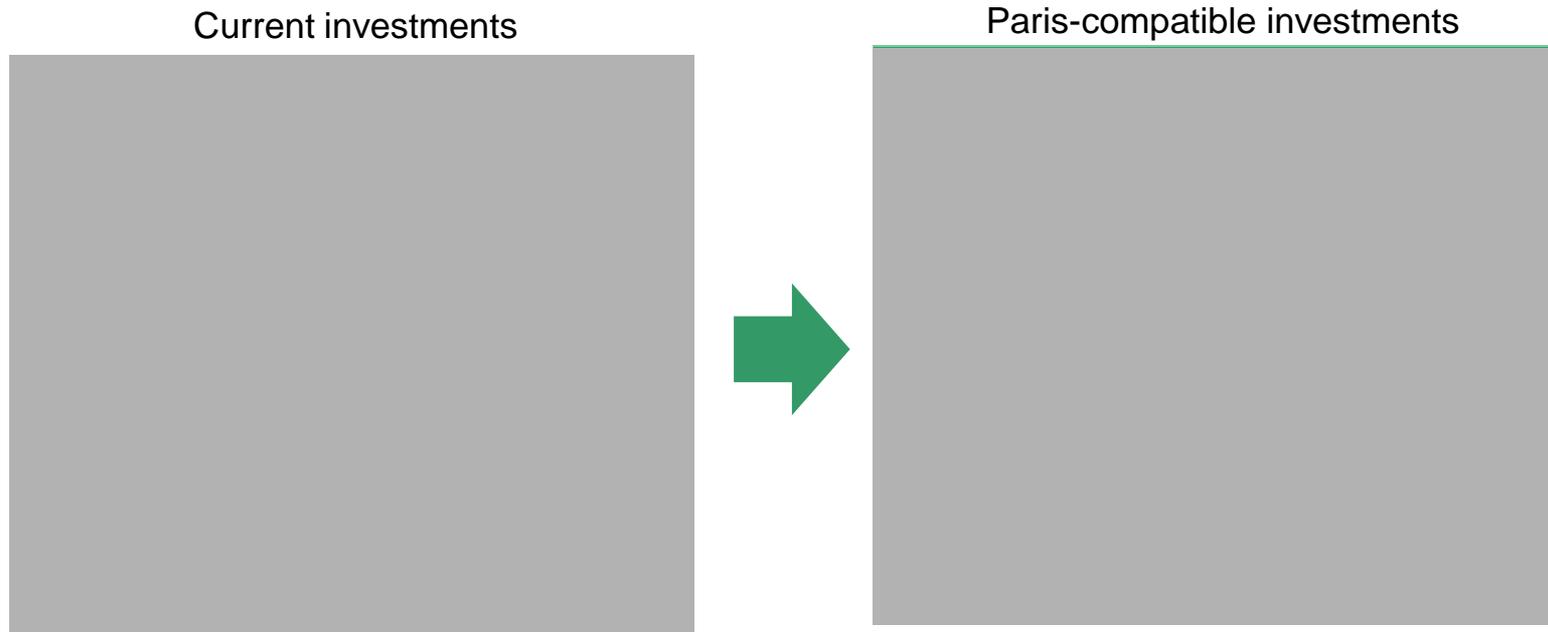
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Workshop on climate finance flows and investment needs

Hanna Fekete

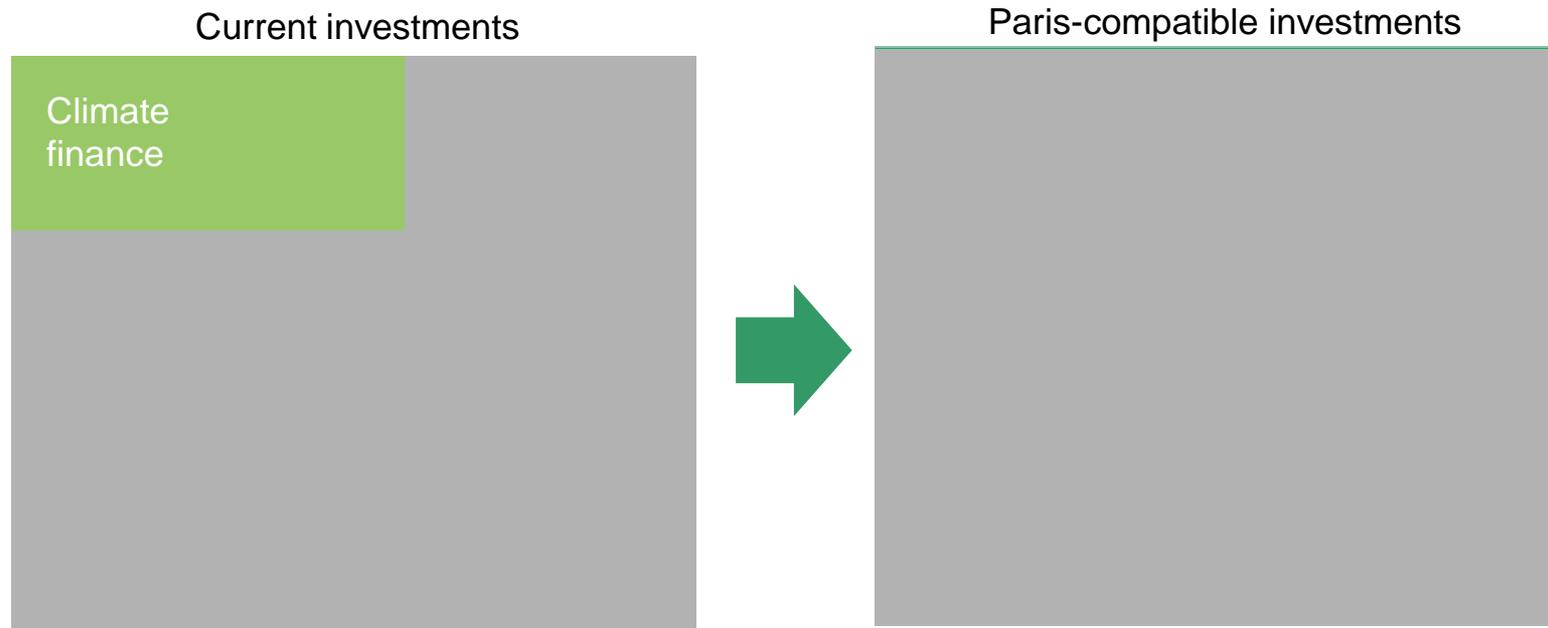
Berlin, 15 March 2019

# Shifting paradigms: from climate finance to Paris alignment



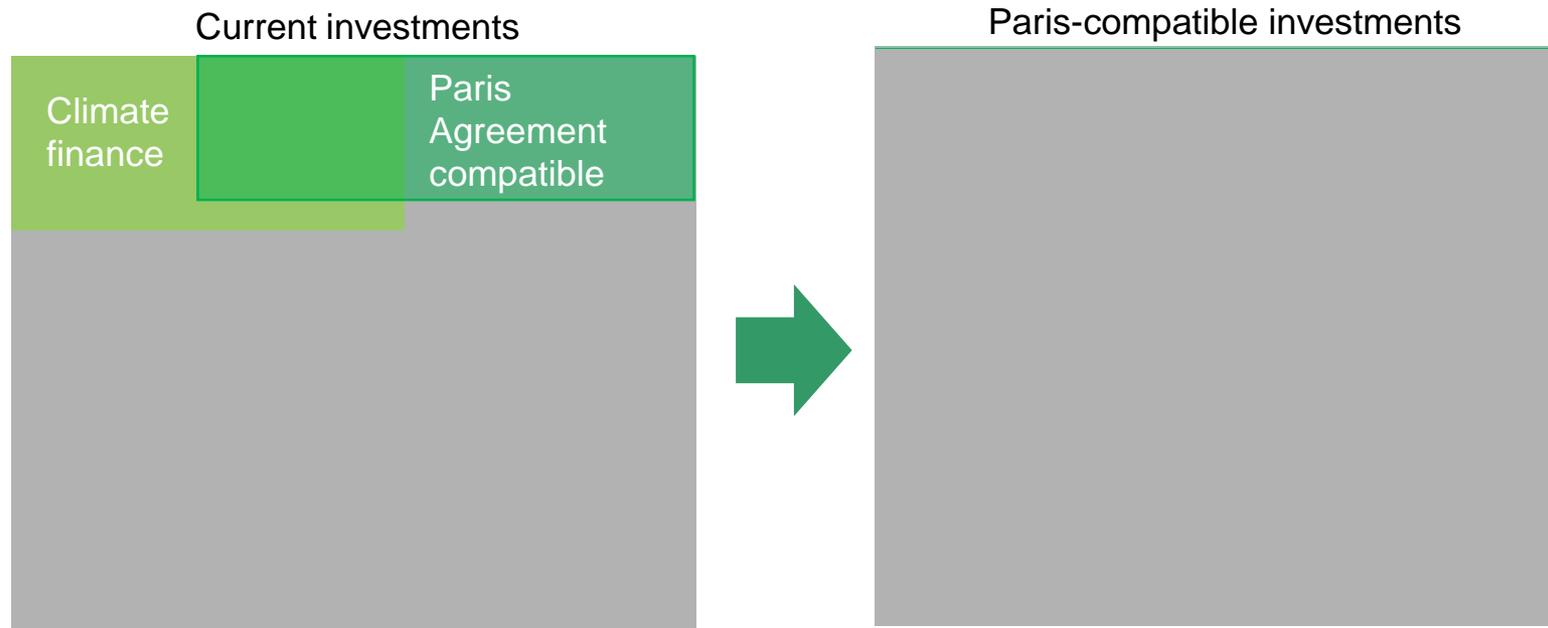
Source: Adapted from Larsen et al 2018

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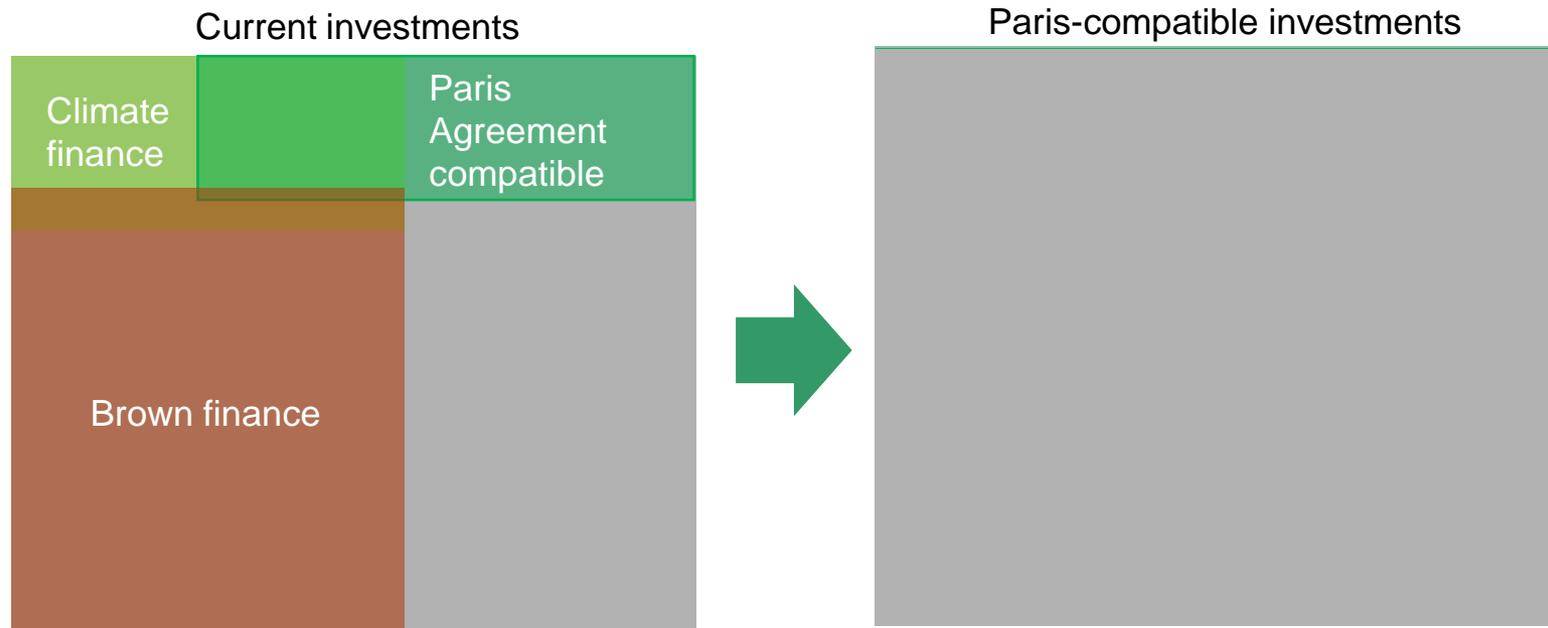
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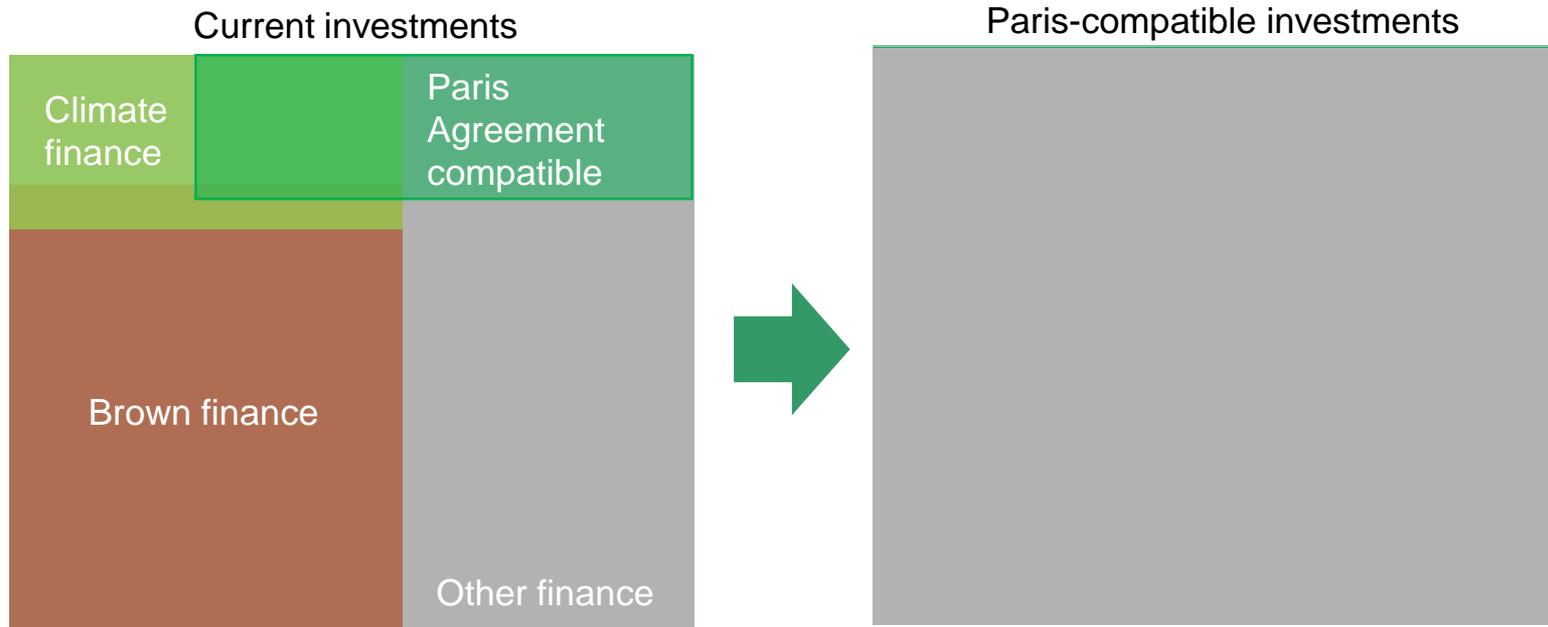
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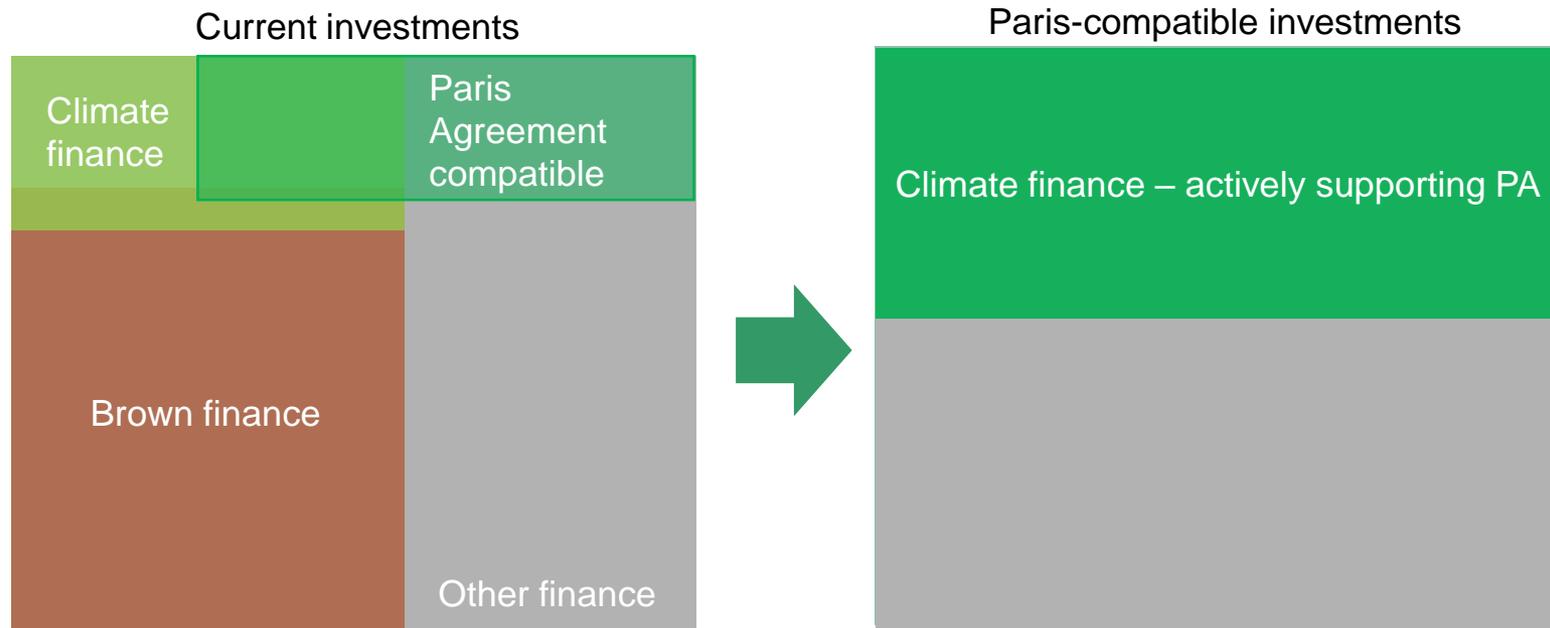
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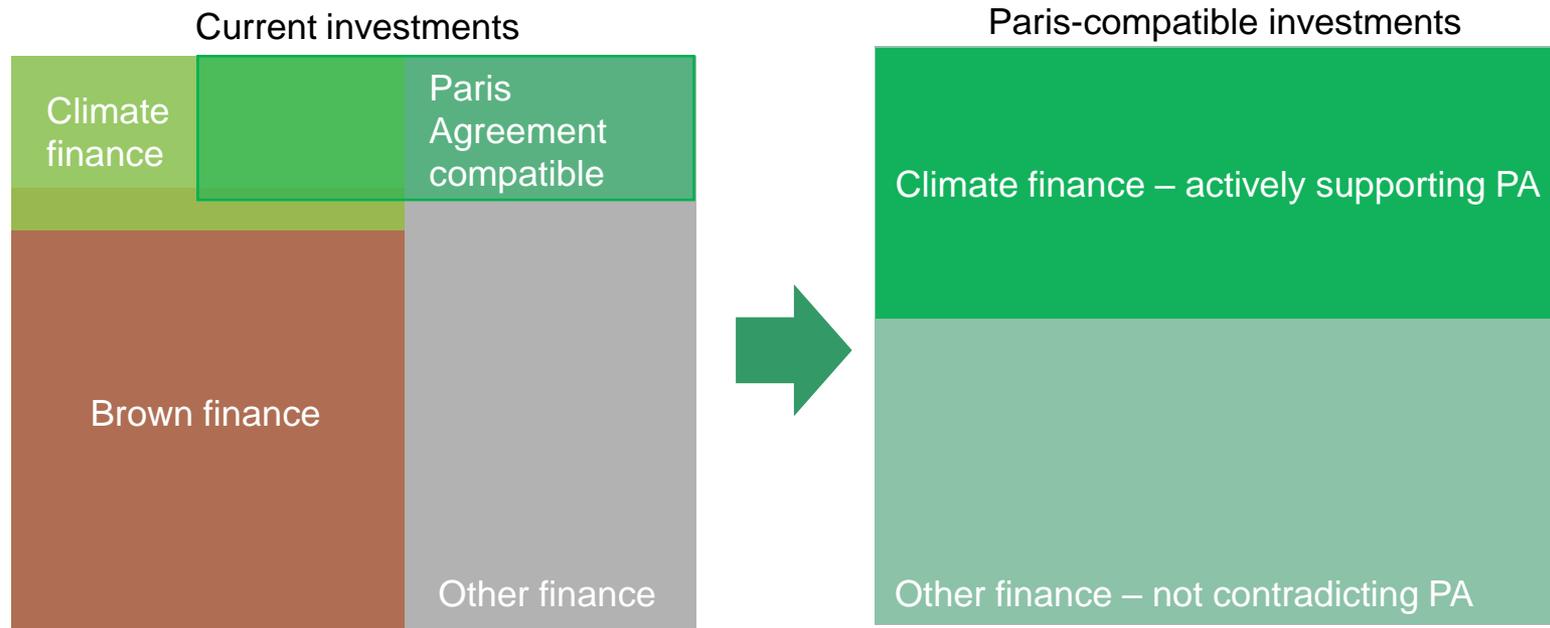
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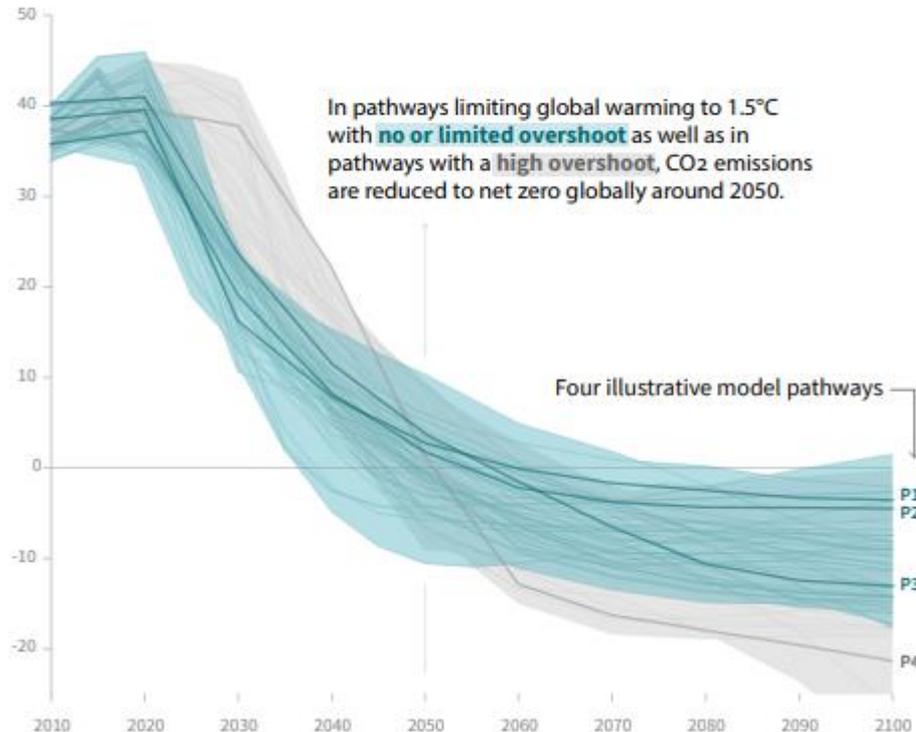


Source: Adapted from Larsen et al 2018

# Breaking down the Paris Agreement mitigation goal

## Global total net CO<sub>2</sub> emissions

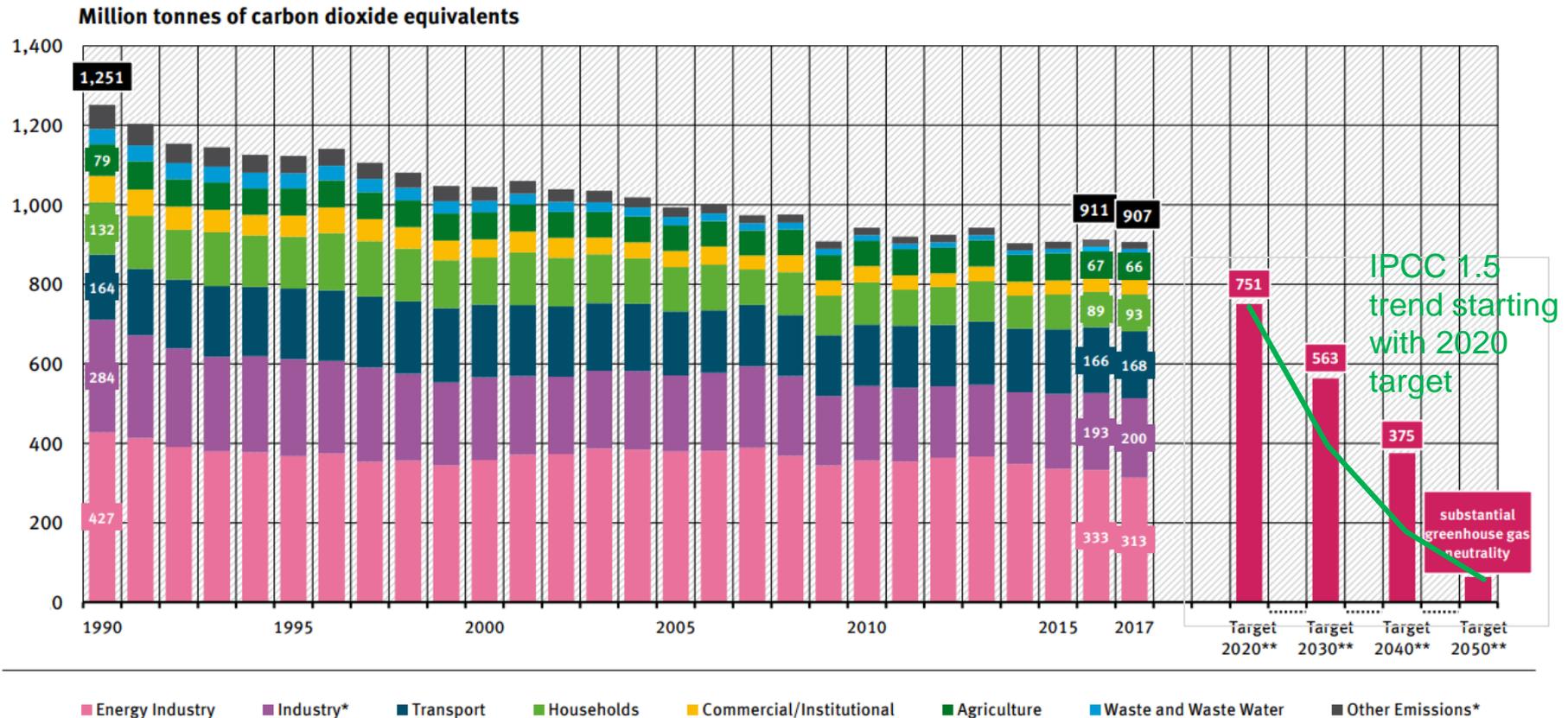
Billion tonnes of CO<sub>2</sub>/yr



Source: IPCC 2018, Global Warming of 1.5 °C

- Global GHG emissions need to peak quickly, and become net-zero in the second half of the century. **CO<sub>2</sub> emissions need to be at net-zero around 2050.**
- There are **differences in how quick and how deep** decarbonisation can happen depending on the sector and country.
- Decarbonisation has to happen **quicker in energy, especially in the electricity sector.**

# Historical emissions and future targets of Germany



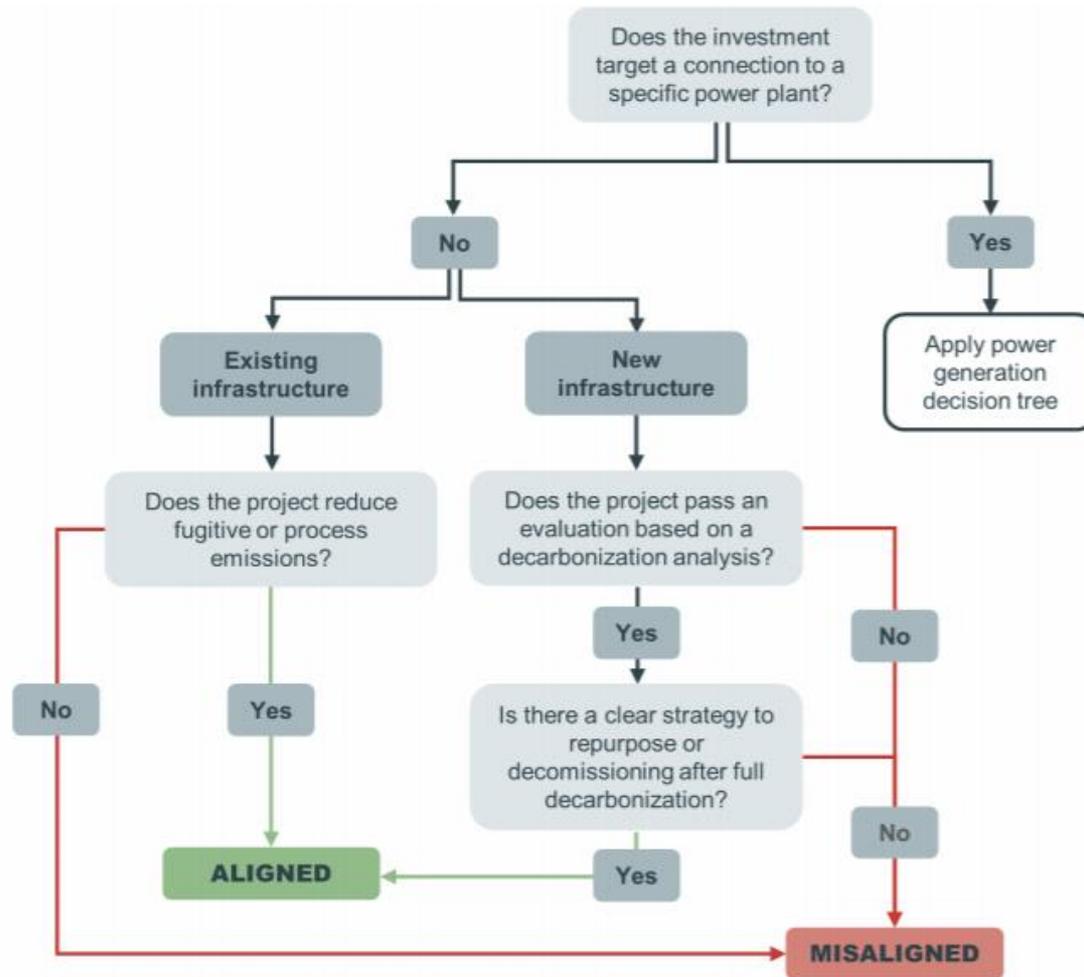
Sources: German Federal Environment Agency (2019), Höhne et al. (2019)

# Categorising investment areas: Example energy infrastructure

PARIS-ALIGNED	CONDITIONAL	MISALIGNED
<p><b>Fully aligned with Paris Agreement consistently across all scenarios</b></p> <ul style="list-style-type: none"> <li>• Solar energy</li> <li>• Wind energy</li> <li>• Small hydropower</li> <li>• Tidal, wave and ocean energy</li> <li>• System flexibility options (electricity energy storage, demand response, ...)</li> </ul>	<p><b>Aligned depending on conditions</b></p> <ul style="list-style-type: none"> <li>• Energy transmission and distribution infrastructure</li> <li>• Geothermal<sup>2)</sup></li> </ul> <hr/> <ul style="list-style-type: none"> <li>• Gas (power plants, transport of gas)<sup>1)</sup></li> </ul> <hr/> <ul style="list-style-type: none"> <li>• Large hydropower<sup>2),3)</sup></li> <li>• Bioenergy, incl. bio energy carbon capture storage<sup>3),4)</sup></li> <li>• Coal with carbon capture and storage (CCS)<sup>1),3)</sup></li> <li>• Nuclear<sup>3)</sup></li> </ul>	<p><b>Consistently Paris misaligned in all scenarios</b></p> <ul style="list-style-type: none"> <li>• Coal fired power plants with unabated emissions over their lifetime</li> <li>• Oil power plants</li> <li>• Coal mining</li> <li>• New upstream oil and gas exploration and production</li> </ul>

Source: Germanwatch and NewClimate 2018, Aligning Investments with the Temperature Goal of the Paris Agreement - Challenges and Opportunities for Multilateral Development Banks

# Decision trees: Example gas infrastructure



## Integration of Paris-compatibility in investment decisions

» ...has multiple technical solutions:

The exact approach needs to be tailored to the sector, the finance institution and the political context.

» ... is starting to happen:

Various banks discuss approaches, with steps towards implementation, however not a comprehensive exercise across the finance sector.

» ...needs to consider the national context of investments:

Assessment of Paris-compatibility must consider and be integrated in long-term development planning.

# Questions for discussion

- » How can Paris alignment be reflected in **tracking and investment needs assessments**?
- » How can Paris alignment be integrated in modelling and **decision making at national and sectoral level**?
- » How to **mainstream** Paris alignment to all kinds of investors?
- » How to not only shift financial flows, but actively make a change in **capital stock** (especially how to retire lots of existing capital stock early and likely long before the potential maximum working lifetime of those assets)?



**Thank you for your attention!**

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- » IPCC, 2018. IPCC special report on the impacts of global warming of 1.5 °C - Summary for policy makers. [http://report.ipcc.ch/sr15/pdf/sr15\\_spm\\_final.pdf](http://report.ipcc.ch/sr15/pdf/sr15_spm_final.pdf)
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- » Germanwatch and NewClimate, 2018. Aligning investments with the Paris Agreement temperature goal - Challenges and opportunities for Multilateral Development Banks. [https://newclimate.org/wp-content/uploads/2018/09/MDB\\_WorkingPaper\\_2018-09.pdf](https://newclimate.org/wp-content/uploads/2018/09/MDB_WorkingPaper_2018-09.pdf)
- » Höhne, N., Emmrich, J., Fekete, H., Kuramochi, T., 2019. 1,5°C: Was Deutschland tun muss (1.5°C: What Germany needs to do) [https://newclimate.org/wp-content/uploads/2019/03/Deutschland\\_1.5\\_Web.pdf](https://newclimate.org/wp-content/uploads/2019/03/Deutschland_1.5_Web.pdf)
- » Larsen, G., Smith, C., Krishnan, N., Bartosch, S., & Fekete, H., 2018. Toward Paris Alignment - How the Multilateral Development Banks Can Better Support the Paris Agreement. <https://newclimate.org/wp-content/uploads/2018/12/WRI-MDBs-and-Paris-Report-.pdf>

# Tools for including considerations on PA-compatibility in investing decisions

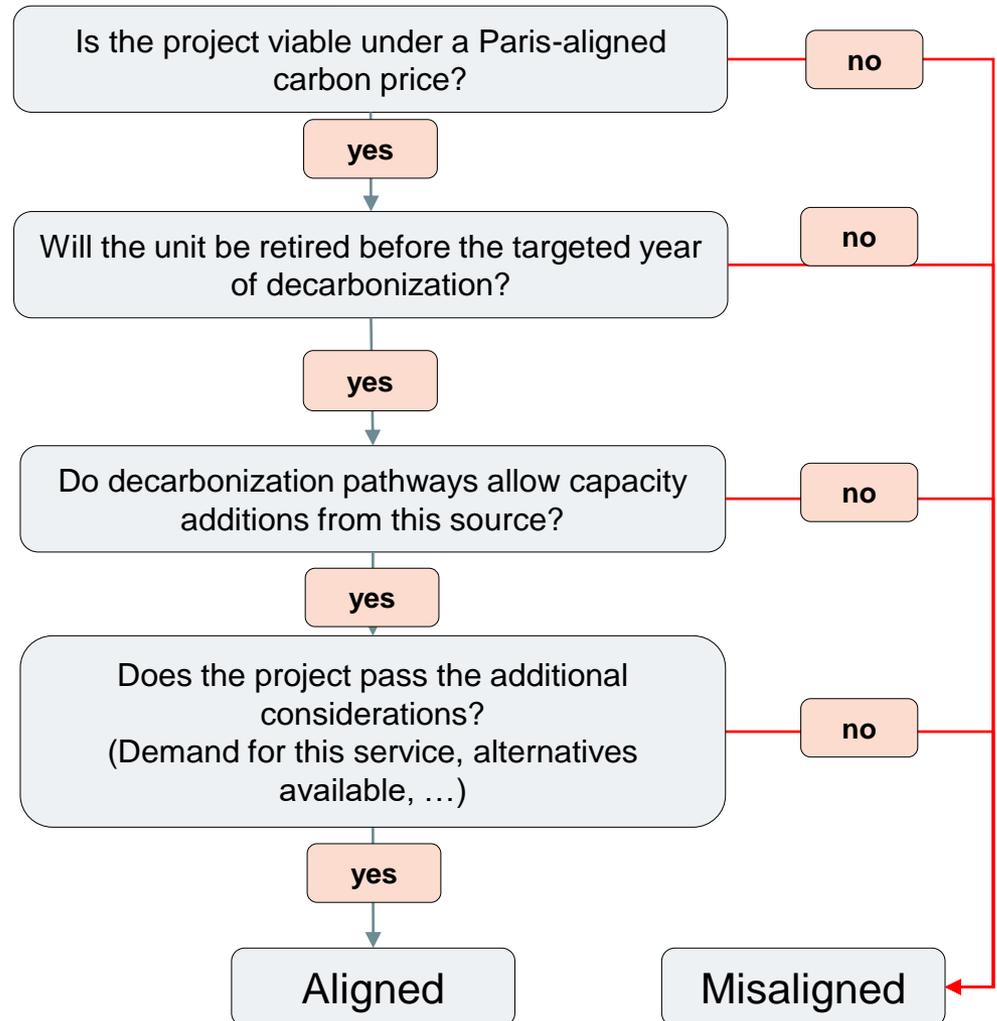
BANK STRATEGY LEVEL	COUNTRY STRATEGY LEVEL SECTOR STRATEGY LEVEL	PROJECT LEVEL
 <p>GHG accounting + Portfolio emission target</p>	 <p>Supporting and enhancing NDCs and LTS</p>	 <p>Negative list Positive list</p>
 <p>Climate finance target</p>	 <p>Country emission pathways</p>	 <p>GHG accounting + Emission Benchmarks</p>
 <p>Setting standards for finan- cial institutions world wide through financial interme- diary lending</p>	 <p>GHG accounting + Sector emission targets</p>	 <p>GHG accounting + Shadow carbon pricing</p>
 <p>Supporting the enabling environment through policy based lending</p>		 <p>Decision trees combining several tools (including country &amp; sector decarbo- nization pathways)</p>

Source: Germanwatch and NewClimate 2018, Aligning Investments with the Temperature Goal of the Paris Agreement - Challenges and Opportunities for Multilateral Development Banks

# Decision tree – power plants

Main requirements from Paris-aligned pathways:

- » Phase out coal and oil
- » Ramp up zero-carbon solutions fast
- » Use gas only in limited occasions, keeping time horizon in mind



# Decision tree – Grid improvements

» For grid extensions or renovations not linking one specific power plant

» Main requirements from Paris-aligned pathways:

- Electrification
- High share of variable renewables

