

# Sustainable finance to fund Asia's energy future

## 可持续金融推动亚洲未来能源发展

Herry Cho, Head of Sustainable Finance, Asia Pacific  
赵慧利, 亚太区可持续金融负责人



# Banks commit to support Paris

# Agreement

# 银行承诺支持《巴黎气候协议》

# TCFD vs climate change measurement

## 《气候相关财务揭露专案小组》与气候变化措施

TCFD recommendations encourage organisations to:

“Describe the resilience of the organization’s strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario”

Climate change measurement:

To what extent is a bank’s loan portfolio aligned with the Paris Agreement?



“What is the impact of climate change on my business?”

“What is the impact of my business on climate change?”



# Financed technologies: validated method to align to 2°C goal

## 融资技术：符合摄氏2度目标的验证方法

2°ii<sup>1</sup> – a global think tank on climate-related metrics and policies in financial markets

- 2dii developed methodology for the asset management industry (equity and bond portfolios)
- ING – as the first bank – is leading pilot to adapt methodology to the banking industry
- Approach validated with
  - Academics
  - Banks
  - Politicians, civil servants, NGOs and other stakeholders



### Partners



# Explaining the climate alignment of a bank's loan book 解释银行融资组合如何符合气候情景

The methodology allows a bank to answer the following research questions:

## *External reporting 外部报告:*

### **Current Exposure:**

Per sector: As per today, what does the portfolio's **technology exposure** look like?

## *Internal steering 内部导向 :*

### **Future Exposure:**

In 5 years, what will the client / portfolio's technology exposure look like?

In 5 years, how should the portfolio's technology exposure look like, in a 2 degree scenario?

# Key characteristics Terra Approach

## Terra方法的关键特性

1. Compare loans per key sector to 2 degree scenarios
2. Focus on required technological change
3. Use of client level data from external databases

Terra is a **pragmatic, forward looking** methodology that allows banks to steer loan portfolios towards **alignment** to the 2 degree **goals of Paris**

Terra是**务实且具有前瞻性**的方法，**将能引导**银行的**贷款组合来达到**  
**《巴黎气候协议》**远低于两摄氏度的目标

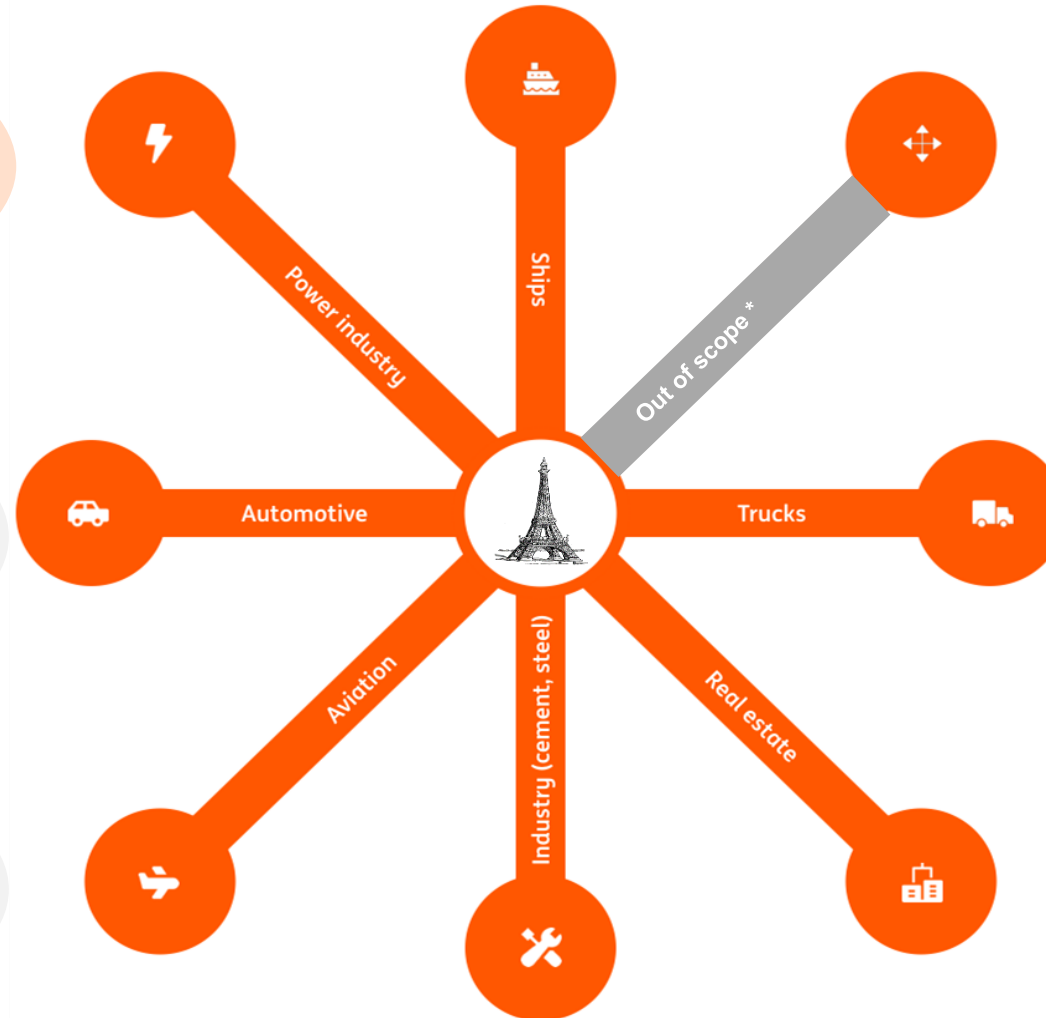
# Different things need to happen in each sector

## 这意味着每个行业都需要有不同的发展

**Power industry:** over time, close down e.g. coal power plants, and invest in a massive growth in renewables (small hydro, sun and wind)

**Automotive industry:** change from internal combustion engines to electric vehicles

**Oil and Gas industry:** decrease in oil and temporary increase in gas to help the power sector transition



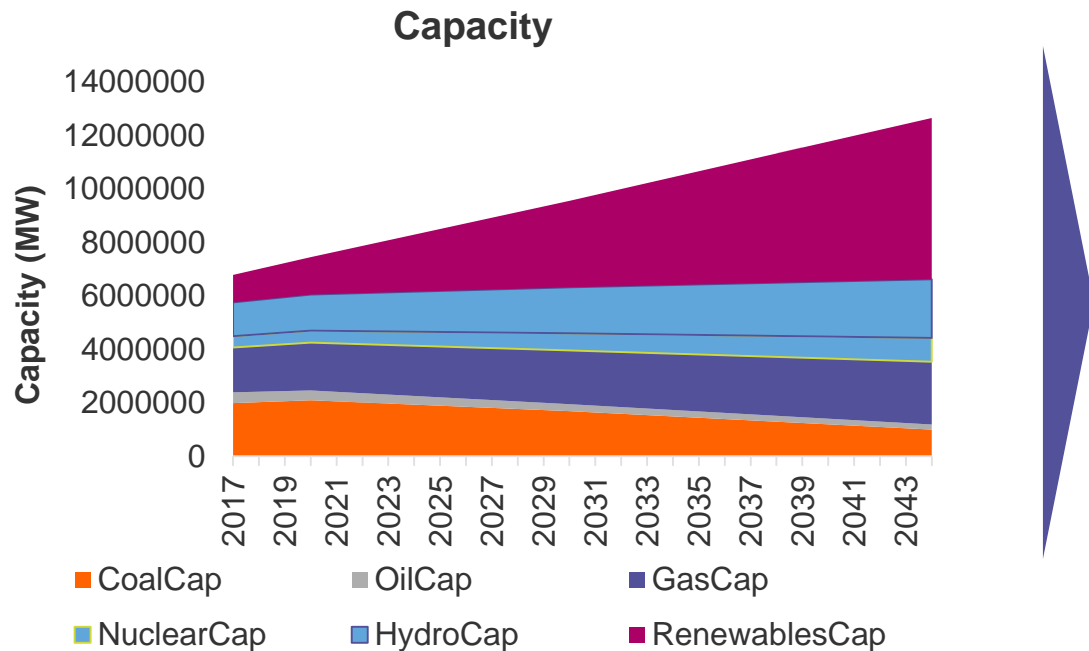
- Methodology does not allow you to compensate between different sectors
- These changes simply need to happen

# Terra methodology looks at the market today and required changes: Banks finance change

## Terra方法关注现在的市场及需要的变化：银行融资的变化

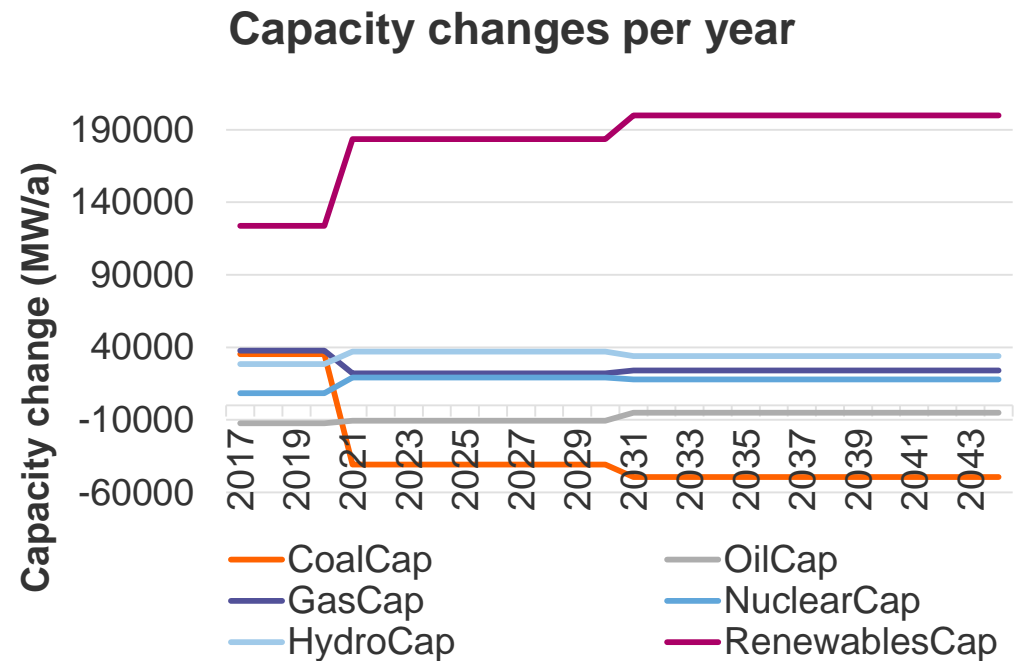
### Example: Power

IEA 2DS scenario (**total** capacity need per technology type)



Aligning to the market today  
今日走向市场

IEA 2DS scenario (**new** capacity need per technology type)

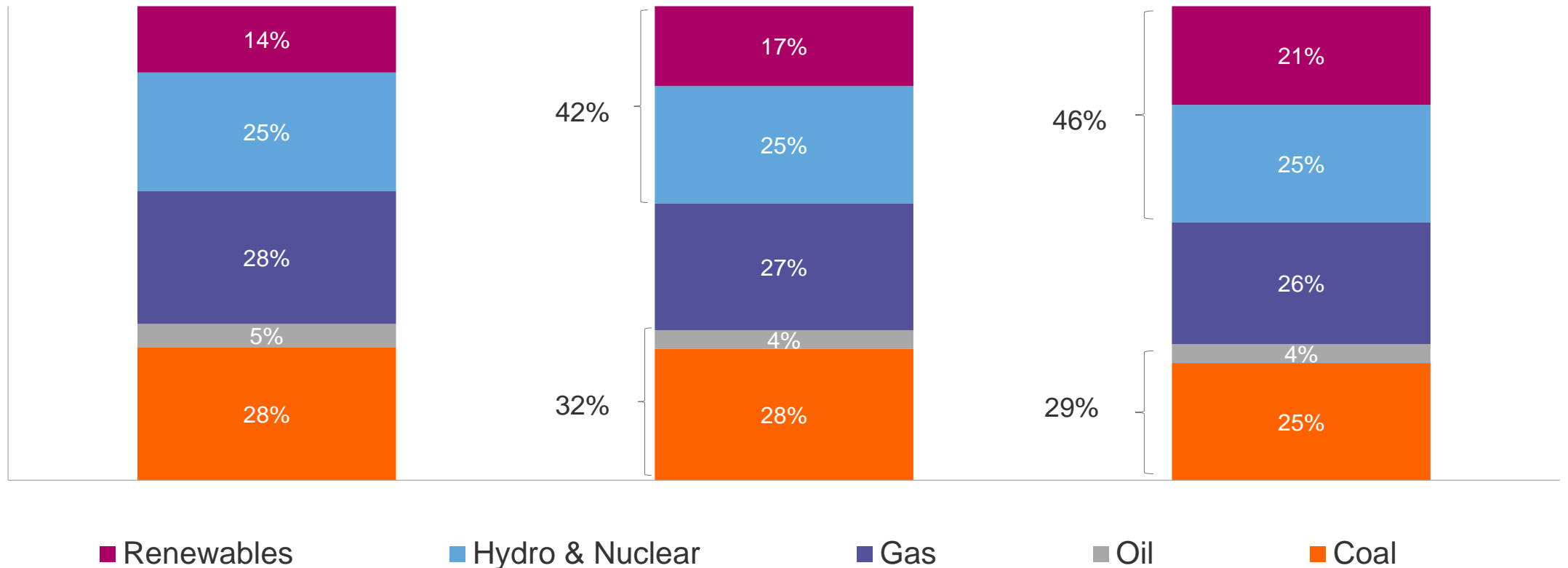


Aligning to the changes needed  
调整所需的变化



# Example Sector view: Power market lagging vs 2 degree scenario 范例行业视图：电力市场落后vs 摄氏两度情景

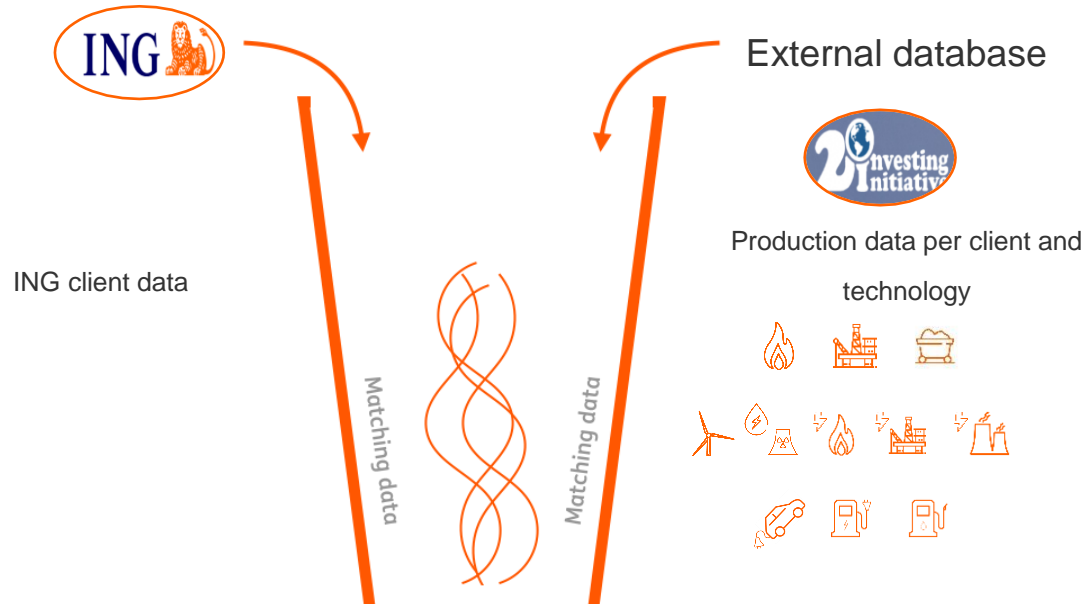
Energy > Power



# Software tool matches global data to banks portfolio and benchmarks it

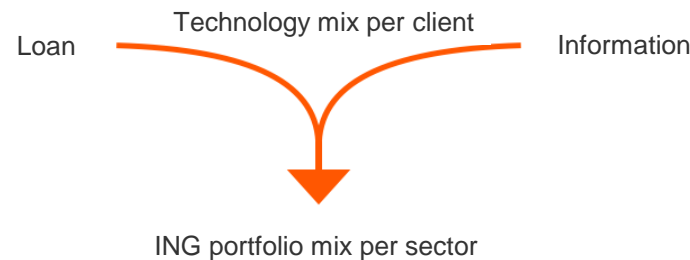
通过软件将实际数据与银行贷款组合进行匹配并对其进行基准测试

## STEP 1



- Relevant metric, e.g.
- Current capacity mix
  - New capacity next 5 years

## STEP 2



Software will be open source

No extra information needed from client

## STEP 3

Benchmark against external 2 degrees scenario

## Other structural changes needed in the market 市场上需要其他的结构变化

1. How can the private sector better leverage on development capital? 私  
营企业该如何更好地利用发展资本？
2. Banks may increasingly find it difficult to lend longer tenors. “Originate  
loan-to-distribute” to institutional investors? 银行可能越来越难以提供更  
长期限的贷款。将“发起贷款至分配”机会转向机构投资者？

# Disclaimer

Certain of the statements contained in this release are statements of future expectations and other forward-looking statements. These expectations are based on management's current views and assumptions and involve known and unknown risks and uncertainties. Actual results, performance or events may differ materially from those in such statements due to, among other things, (i) general economic conditions, in particular economic conditions in ING's core markets, (ii) changes in the availability of, and costs associated with, sources of liquidity such as interbank funding, as well as conditions in the credit markets generally, including changes in borrower and counterparty creditworthiness, (iii) the frequency and severity of insured loss events, (iv) mortality and morbidity levels and trends, (v) persistency levels, (vi) interest rate levels, (vii) currency exchange rates, (viii) general competitive factors, (ix) changes in laws and regulations, and (x) changes in the policies of governments and/or regulatory authorities. ING assumes no obligation to update any forward-looking information contained in this document.

ING Groep N.V. ("ING Group") comprises a broad spectrum of companies (the "ING companies"), many of them operating under their own brand names. Almost every ING company, business unit or product group, has its own website on the internet where it offers information about its products and services. Reference is made to those websites for further details and hyperlinks have been provided from this website to those ING companies, business units and product groups, if available. This presentation is not, and should not be construed as, an offer of the products and services of ING companies (other than ING Bank N.V.). In addition, note that the websites and hyperlinks of ING companies may have restrictions, limitations or qualifications on the offer of products or services in the United States or to U.S. persons.

This presentation is intended for general information purposes. It does provide basic information concerning individual Commercial Banking products and related services. Under no circumstances should this presentation be construed as an offer or solicitation by ING Bank N.V. (whether through its Financial Markets business unit or otherwise) or any of its non-U.S. subsidiaries of any brokerage, trading, underwriting or other capital markets or investment advisory product or service in the United States or to any U.S. person. Securities products and services are offered in the United States or to U.S. persons only by and through ING Financial Markets LLC, a U.S. broker-dealer subsidiary of ING Bank N.V. that is registered with the U.S. S.E.C. No warranty or representation, express or implied, is given as to the accuracy or completeness of that information. In no event will ING Group, nor any of its directors, employees or advisors accept any liability with regard to the information contained in the individual ING companies', business unit or product group's presentation. It is prohibited to modify, copy, distribute, transmit, display, publish, sell, license, create derivative works or use any content for any other purposes than that of this presentation, i.e. providing information about ING Group and its lines of business.

ING Bank N.V. does not operate branch offices in the United States, and the deposit instruments described in this presentation are accepted only at offices of ING Bank N.V. located outside the United States. Deposit products offered by ING Bank N.V. or any of its subsidiaries are not insured by the U.S. F.D.I.C., the S.I.P.C., or by any other governmental regulator or agency of the United States. [In addition, the deposit instruments described in this presentation do not benefit from other deposit insurance or guarantee by any governmental agency of the Netherlands or any other jurisdiction or by any other person or entity.]

No deposit or deposit instruments referenced or constituting a part of any product or service described in this presentation (i) is a security, (ii) has been registered with the U.S. S.E.C. or any other governmental regulator or agency, U.S. or non-U.S. Under the U.S. Securities Act of 1933 or any other applicable U.S. or non-U.S. law, and (iii) has been approved or disapproved by the U.S. S.E.C. or any U.S. State, federal, or non-U.S. securities or banking commission or other governmental regulator or agency, and no such commission or agency has passed upon the accuracy or adequacy of this presentation.

Deposit instruments denominated in a currency other than U.S. dollars involve currency and related risks. ING Bank N.V. is not making any representation, or providing any advice, concerning such risks, or concerning foreign exchange or financial markets generally.

Certain products in this presentation may be offered by subsidiaries of ING Bank N.V., including Bank Mendes Gans N.V. ("BMG"). ING Bank N.V. does not act as a representative or representative office of these subsidiaries in the United States, and is not acting to solicit or sell such products or services in the United States.

## **No Liability**

While ING Group and ING companies use reasonable efforts to include accurate and up-to-date information in this presentation, errors or omissions sometimes occur. ING Group and ING companies expressly disclaim any liability, whether in contract, tort, strict liability or otherwise, for any direct, indirect, incidental, consequential, punitive or special damages arising out of or in any way connected with your access to or use of this presentation, and/or any other ING companies' presentations whether or not ING Group and/or ING companies were aware of the possibility of such damages.