

BNP PARIBAS SUSTAINABLE FINANCE UNIVERSITY CHALLENGE 2023

KICK-OFF WEBINAR

22/08/2023



BNP PARIBAS

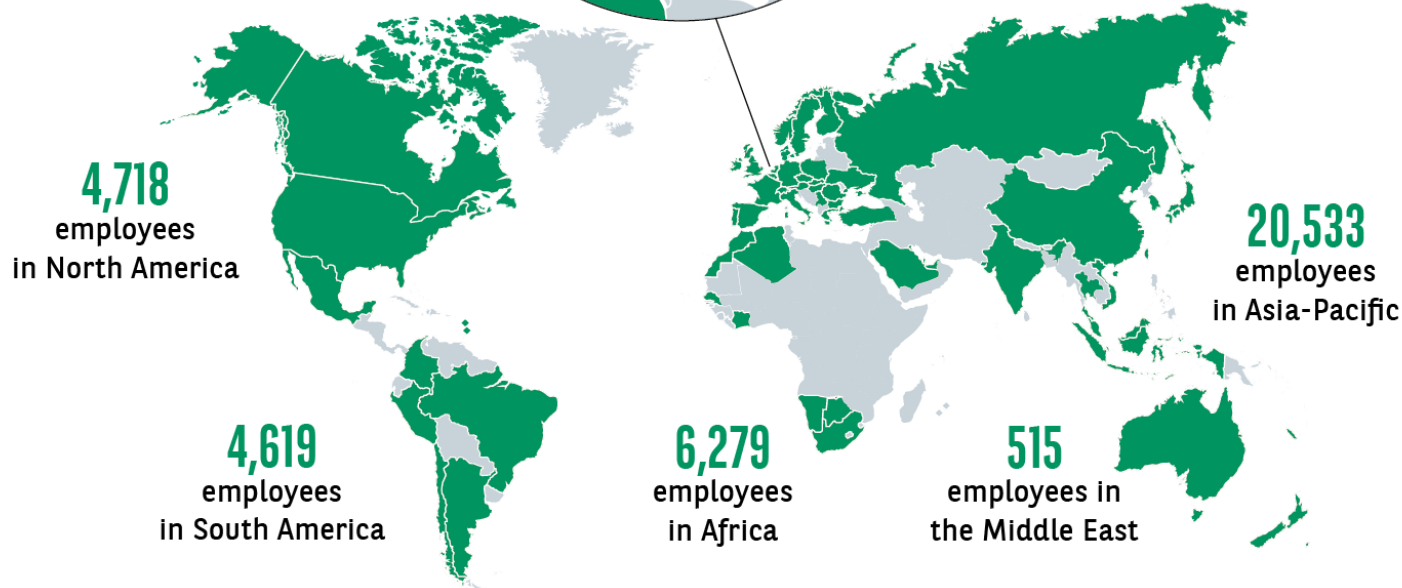
The bank for a changing world

ABOUT BNP PARIBAS

**Nearly 184,000 employees
in 64 countries
and regions**



58,567
employees
in Europe
(excluding domestic markets:
France, Belgium, Italy and
Luxembourg)



€50.4bn¹

Revenues

€10.2bn¹

Net income Group share



€350bn¹

By 2025, mobilised through
sustainable loans and bonds
related to environmental and
social criteria

Figures and locations as of 31/03/2023. The number of employees is reported in Full-Time Equivalent.

¹ 2022 annual result



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August 2023

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■ Classification : Internal

WHAT WE DO

OUR ASSETS



European Group with global reach operating in **64 countries and regions**



183,883-strong committed employees worldwide



Broad diversification by customer segment, geography, sector and business line



A solid financial structure with €126.6bn in shareholder's equity



Cooperation between business lines, to meet all our customers' needs



Technology and innovation at the heart of our model with 670 AI use cases rolled out in 2022



A leading group in sustainable finance, #1 worldwide for green bonds in 2022 for an equivalent of 18 billion euros (source Bloomberg).

OUR DIVERSIFIED AND INTEGRATED MODEL



OUR SOLUTIONS

EVERYDAY BANKING



PAYMENTS



ADVICE



FINANCING



INVESTMENTS



SAVINGS



PROTECTION



BNP PARIBAS

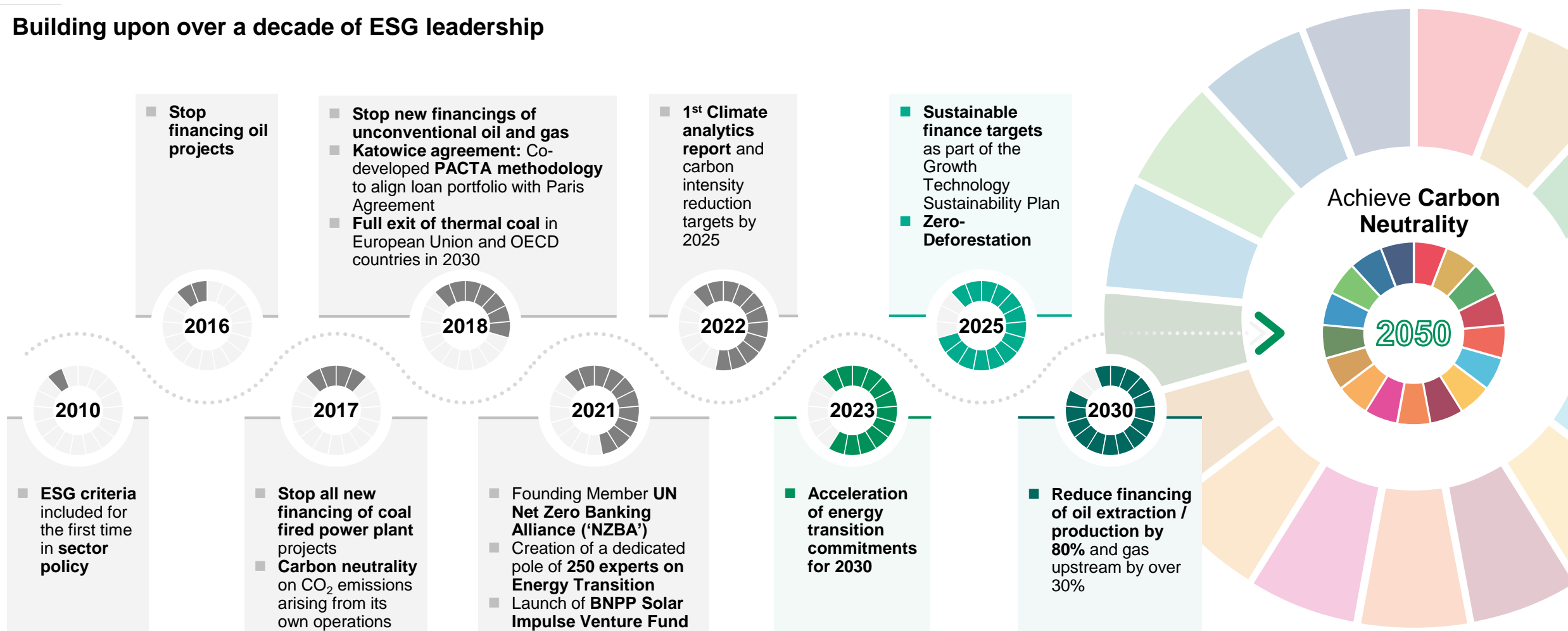
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ACCELERATING THE JOURNEY TO NET ZERO

Building upon over a decade of ESG leadership



A LEADERSHIP RECOGNISED IN OUR MARKET POSITION

AA	71/100	84/100	B
MSCI ESG Ratings February 2023	Moody's 1st of diversified banks February 2023	S&P Global Score methodology February 2023	CDP February 2023



World's Best Bank in Sustainable Finance
Euromoney Awards for Excellence 2023 (3rd year in a row)



Bank for Sustainability
APAC ESG Financing House of the Year
IFR Awards 2022



In 2022, the BNP Paribas share is included in the Bloomberg Gender-Equality index



Top Employers Europe 2022 for the ninth consecutive year

1st

Among French banks and 4th among banks overall in the 2023 ranking of the 100 Most Sustainable Companies awarded by Canadian magazine Corporate Knights



BNP PARIBAS SUSTAINABLE FINANCE CHALLENGE 2023

- Bringing together your ideas and BNP Paribas' sector expertise to create a **positive impact**.
- To solve, with the support of **BNP Paribas senior mentors**, a **concrete issue in sustainable finance** that is faced by banks and the wider industry.
- A unique opportunity to better understand how a leading international financial institution works and to make a difference.

Exciting prizes

SGD 10,000 CASH PRIZE

shared across the 3 winning teams and recognition from top Management of the bank

FAST TRACK

in BNP Paribas graduate or internship program recruitment process for the winning team

Prestigious jury



FLORENCE FOO
Head of Human Resources
Southeast Asia and Singapore,
BNP Paribas



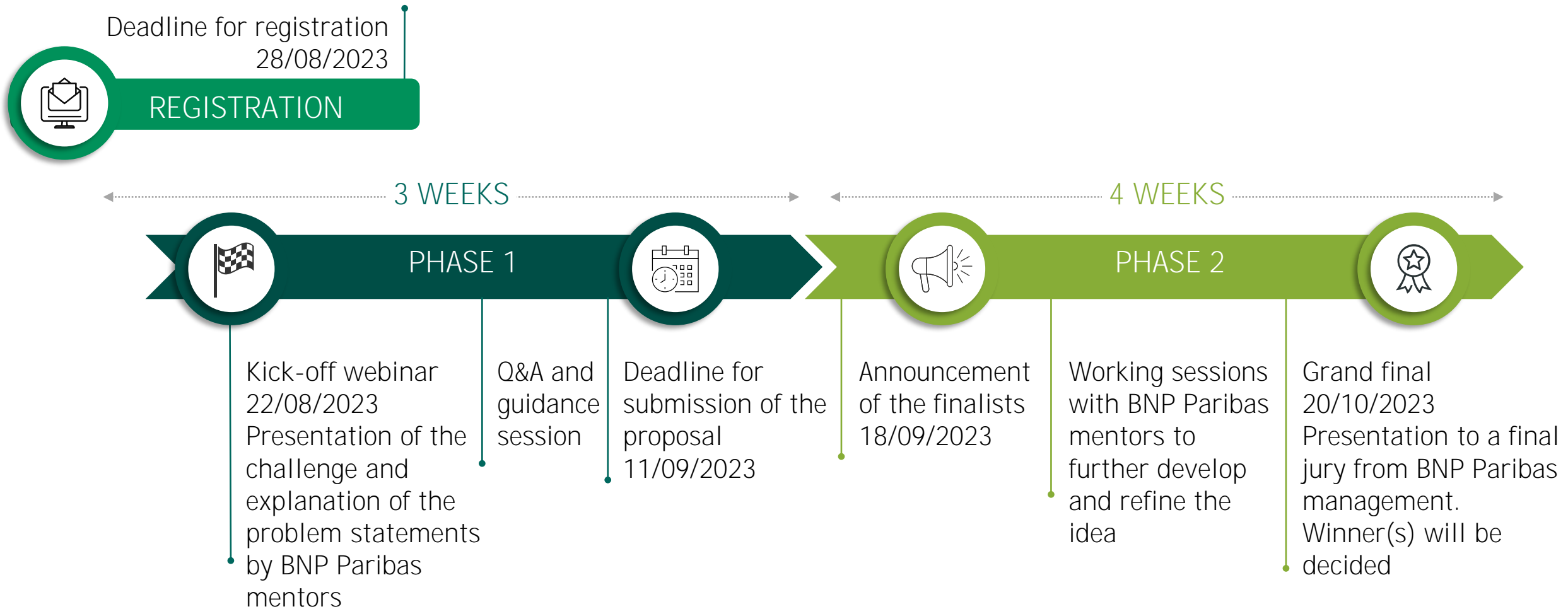
JORIS DIERCKX
Regional Head for Southeast Asia
and CEO, Singapore branch
BNP Paribas



SABRINA NOIRAN
Chief Sustainable Business Officer
BNP Paribas Corporate &
Institutional Banking APAC



TIMELINE



PRACTICAL INFORMATION

CRITERIA FOR REGISTRATION

- NTU, NUS or SMU Penultimate year to postgraduate students
- Team of 3-5 students from the same university
- Each team picks 1 problem statement from the list to work on
- To register, fill in the registration form available on the [website](#) and send it to sfchallenge@asia.bnpparibas.com by 28 August, 2023.

DELIVERABLES

FORMAT	Short slide deck in PDF (supporting research materials can also be included)
STRUCTURE	Your slide deck to include the following elements: Description of the solution, analysis of the proposition (e.g. SWOT analysis), resources needed to develop the solution (cost, stakeholders involved, timeline of implementation, etc.)

JUDGING CRITERIA

Creativity and innovation	Relevance of the solution to the problem statement	
Feasibility	Impact	Overall quality of the presentation

USEFUL LINKS

Official website: <https://apac.bnpparibas/en/our-solutions/sustainable-finance/university-challenge>

Got a question? [FAQ](#) or email us at sfchallenge@asia.bnpparibas.com



PROBLEM STATEMENTS

- A. What would it take to build a Sustainable Aviation Fuel (SAF) hub in Singapore?
- B. How can BNP Paribas collaborate with the local ecosystem to develop the use of Sustainable Aviation Fuel (SAF)? - Arnaud Bouchet
- C. How can we design ESG-related KPIs for BNP Paribas employees that are relevant, motivating and actionable?
- D. Going beyond financial benefits how can we reward the most engaged employees in terms of sustainability? - Dominic Pan
- E. How can we design and/or monitor relevant short-term KPIs to measure the ESG performance of a company, using technology or other means? - Krishna Sampath
- F. ESG Data vendors provide ESG data to investors and companies. That said, vendors may not offer sufficient coverage, especially in emerging markets. To address this challenge, how would you collect or estimate ESG data in emerging markets? You can choose any ESG data in any emerging countries or regions (e.g. greenhouse gas (GHG) emission in a country, water consumption in Southeast Asia, etc.) - Mihwa Park



Arnaud BOUCHET

Director

Energy, Natural Resources, Infrastructure & Transportation

Global Banking Asia-Pacific

Arnaud works in the Investment Banking division of BNP Paribas based in Singapore. He is a sector banker specialized in Transportation, Infrastructure & Logistics across APAC. Passionate about these sectors, he is in charge of originating and executing M&A and capital market transactions in these sectors.

Arnaud was previously an equity research analyst covering Asian airlines. He started his career in 2006 within BNP Paribas Energy Finance division in the Gulf covering Middle-Eastern clients.



BNP PARIBAS' ENRIT TEAM IN APAC

Sector coverage

-  **Power & Renewables**
Wind, Solar, Hydro, Storage, Conventional Power (ex. Coal), Transmission & Distribution, Supply
-  **Oil & Gas / Chemicals**
Exploration & Production, LNG, Transport & Storage, Refining & Processing, Hydrogen & CCUS
-  **Metals & Mining**
Mining & Processing of: Nickel, Lithium, Cobalt, Copper, Gold, Zinc, Aluminum, Steel
-  **Infrastructure**
Airports, Toll Roads, Ports, Railways, Waste Management
-  **Logistics**
Warehousing, Freight forwarding, Courier & Express Services, 3/4PL
-  **Transport**
Shipping, Aviation, Land Transport

*Highlighted in green: Low Carbon Transition Group

Key products

M&A ADVISORY

Excellent track record of originating and successfully executing tailor-made transactions

EQUITY CAPITAL MARKETS

Our Equity & Debt Markets professionals work hand in hand, ensuring alignment of all activities across origination, structuring and syndication

DEBT CAPITAL MARKETS

Product neutrality guarantees delivery of the financing solution that best fit our Corporate Clients needs



PROBLEM STATEMENT

Aviation is a hard to abate sector in terms of decarbonisation. Despite an ambition to decarbonise the industry, the path to reaching that goal is complex. In the medium term, one of the most important levers to decarbonising the sector is the use of less carbon intensive fuels, or Sustainable Aviation Fuels (SAF). That is why it is essential to find ways to develop their use at scale and in an efficient manner.

- A. What would it take to build a Sustainable Aviation Fuel (SAF) hub in Singapore?
- B. How can BNP Paribas collaborate with the local ecosystem to develop the use of Sustainable Aviation Fuel (SAF)?





Dominic PAN

APAC – Global Capital Markets - Head of Energy & Natural Resources (Low Carbon Transition Group)

Based in Singapore, he advises corporate clients across the region within the energy, natural resources and chemicals on low carbon transition solutions across advisory and financing mandates.

Possesses ~17 years working experience, with a CPA (Australia), he has bachelor degree from the University of Western Australia, majoring in Corporate Finance, Financial & Managerial Accounting with a minor in Business Law.

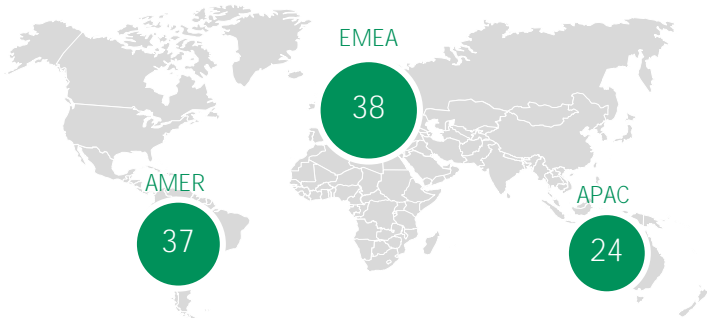


BNP PARIBAS LOW CARBON TRANSITION GROUP



A global setup of 160+ bankers

→ ~100 LCTG members dedicated to low-carbon origination



→ ~60+ low-carbon transition partners across Coverage, Industry Groups, Global Banking business lines, as well as CIB, CPBS and IPS platforms



Senior expertise across key transitioning sectors



Power & utilities, Renewables



Low-Carbon Hydrogen



Mid- & Down-stream Energies



Oil & Gas, Low carbon solutions



Transition Minerals, Metals & Batteries



Combining the breadth of BNP Paribas capabilities



Corporate Finance Advisory & Private Placement



Equity capital markets & Distribution



Structured finance Advisory & arranging



Risk Management



Prime access to the breadth of BNPP integrated bank model

- ✓ Asset Management
- ✓ Leasing Solutions
- ✓ Principal Investments
- ✓ Real Estate
- ✓ Personal Finance
- ✓ Cardif



A global, cross-sector and value-chain approach enabling us to address client needs in the transition to a low-carbon economy



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PRIORITIZING THE MOST IMPACTFUL LOW-CARBON TRANSITION SECTORS & TECHNOLOGIES

Focus areas: Low-Carbon Technology x Sector

SECTORS	Transition to Renewables	Electrification of Uses	Low-Carbon Hydrogen Value Chain	Carbon Capture, Use & Storage (CCUS)	Sobriety (incl. energy & materials efficiency)
Power & Utilities ⁽¹⁾	✓	✓	✓	✓	✓
Oil & Gas ⁽²⁾	✓	✓	✓	✓	✓
Mid-stream Infrastructure	✓		✓	✓	✓
Chemicals	✓	✓	✓	✓	✓
Hard-to-abate industries ⁽³⁾		✓	✓	✓	✓
Transportation (Shipping, Aviation)		✓	✓	✓	
Mobility		✓	✓	✓	

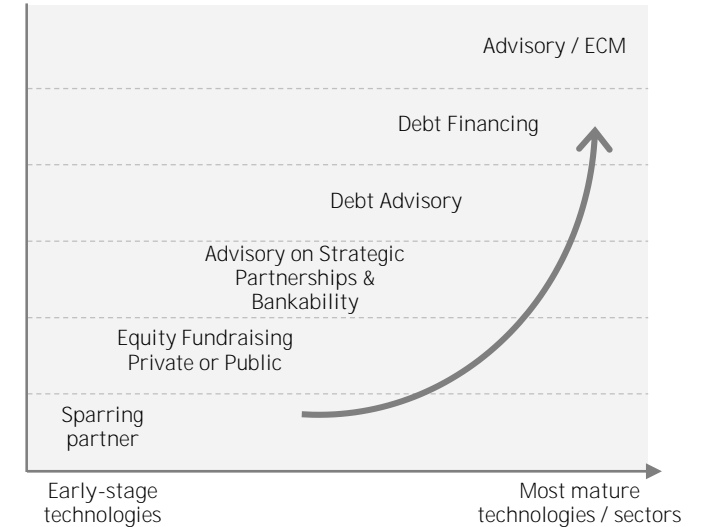
✓ LCTG only addresses low-carbon related topics, not other ESG topics (e.g. biodiversity, social)

(1) Including Heat Generation; Including Nuclear Power which has been included in the EU taxonomy as a low-carbon power generation technology, with criteria regarding security, treatment of nuclear waste and decommissioning;
 (2) Gas / LNG considered as a transition energy in EU taxonomy under specific condition criteria or thresholds; (3) 'Hard-to-abate-industries': e.g. Cement, Building, etc.

Differentiating approach

- Holistic x-sector value chain approach enabling to **adapt to clients' complex needs & maturity to reach scale**

Range of banking needs



- Sector Content & Technical know-how on low-carbon to tackle a complex risk environment



PROBLEM STATEMENT

As the bank for a changing world, BNP Paribas recognises the need to accelerate our transformation at scale with the challenges of our time. Having a strong ESG culture is essential for the company to implement its sustainability strategy and achieve its objectives. To achieve that, a mindset shift is needed among all employees, but can prove challenging to measure and monitor, looking at the different roles and functions within the organisation, across sales, relationship management, product development but also risk, legal, compliance, IT.

C. How can we design ESG-related KPIs for BNP Paribas employees that are relevant, motivating and actionable?

D. Going beyond financial benefits how can we reward the most engaged employees in terms of sustainability?





Krishna SAMPATH APAC head of Liquidity and Investment

Advisory for BNP Paribas based in Singapore. In this role he is responsible for the steering of corporate deposits, and structuring bespoke liquidity solutions for corporate clients across the region.

Prior to joining BNP Paribas, Krishna worked with Standard Chartered and Citi in Singapore, New York and Dublin.

He has an MS in mechanical engineering from Worcester Polytechnic Institute, and an MBA from Cornell University.



TBA - WHO ARE WE?

OUR
TEAM



Cash Management

- Digital Payments & Collections
- eBanking – Internet, mobile and multibank connectivity
- Cash Visibility and Reconciliation
- Domestic, Cross-border & Global solutions



Liquidity & Investment Solutions

- Cash pooling – physical concentration and notional pooling
- Sigh deposits – yield enhancement solution (Core; Core+)
- Term deposits



Global Trade Solutions

- Documentary Credit and Collection
- Banker Guarantee
- Trade Loan
- Receivable and Supplier Financing
- Trade Syndication and Distribution

OUR
PRODUCTS

FOR OUR CLIENTS

- Effective and efficient treasury solution
- Working capital support
- Cash visibility/ forecasting
- Enhance return on idle cash
- Reduced financing cost
- Improve its balance sheet

FOR OUR BANK

- A growing business in banking
- Client oriented & economically connected business
- Sticky and recurrent incomes
- Self-funded (Deposit \geq Funded Asset)
- Improve our NFB position
- Promote cross-selling

C

CONNEXIS CASH

T

CONNEXIS TRADE

Sc

SUPPLY CHAIN

Fx

FOREIGN EXCHANGE

D

CORTEX DEPOSIT

Doc

MY DOCUMENTS

WE

WELCOME

Rs

RESEARCH



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PROBLEM STATEMENT

The development of innovative finance tools and instruments to address social and environmental problems is an ever evolving space. Currently, KPI setting and tracking are built only into longer term financing instruments, e.g. green or sustainability-linked bonds or loans, where an annual reporting on ESG performance would be sufficient. But there are limited precedents of ESG performance indicators for shorter term solutions e.g. sustainable deposits with an average tenor of 30 to 90 days. The challenge is in setting KPIs that can be tracked and validated in a timely manner, while also being relevant for each sector/industry, such that the appropriate rate incentives can be applied to motivate depositors to deliver better ESG performance.

E. How can we design and/or monitor relevant short-term KPIs to measure the ESG performance of a company, using technology or other means?





Mihwa PARK
Head of ESG Analytics Asia Pacific
Securities Services, BNP Paribas

Mihwa joined BNP Paribas in June 2022, leading product development and management of ESG investment analytics solutions. She oversees research and development of ESG service offerings and product design. She also promotes and maintains ESG analytics and reporting solutions for institutional investors.

Mihwa is equipped with in-depth knowledge of ESG analytics, and 20 years of experience within various financial services industries. Prior to joining BNP Paribas, she was the ESG lead in APAC at BNY Mellon Singapore. Prior to that, she was a credit analyst in Fitch Ratings and DBS Bank in Singapore.

Mihwa holds MBA from University of Virginia and completed executive program with Cambridge Institute for Sustainability Leadership.



SECURITIES SERVICES

Global Custody
Hold institutional clients' financial assets
for safekeeping
Global set-up to support custody and
settlement in over 90 markets



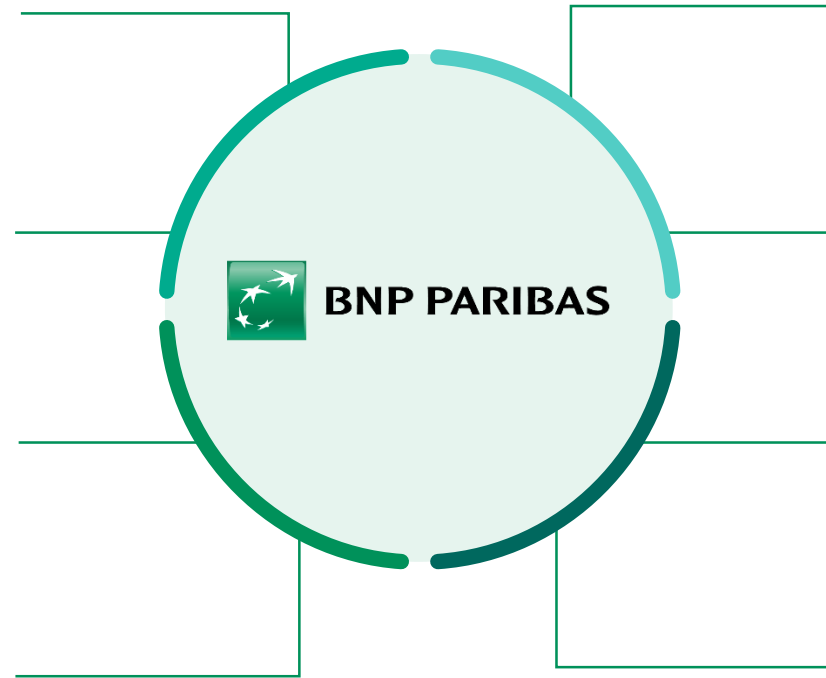
Fund Administration
Provide fully compliant regulatory and
financial reporting



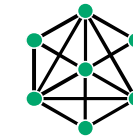
Investment Analytics & Data Solution
Provide a sophisticated tools and
services required for investment
decision-making processes



Sustainability
Provide ESG data management
solutions and ESG analytics (e.g.
financed greenhouse gas emission)



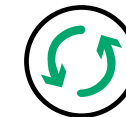
The fifth largest Global Custodian
EUR11.9trn in assets under custody
with access to 90+ markets
through our custody network



Key Competitors
JP Morgan, BNY Mellon, HSBC,
State Street, etc.



Key Clients
Sovereign wealth funds, Pension funds,
Central banks, Asset Managers



Markets Services
Repo, Securities Lending,
Tri-party collateral management



PROBLEM STATEMENT

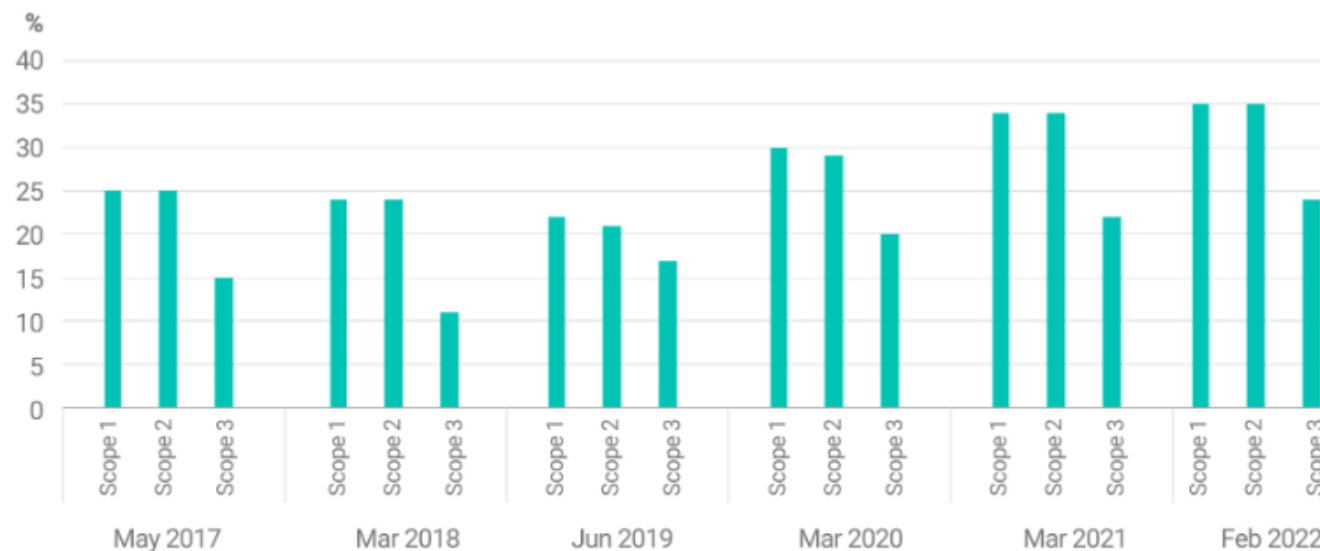
F. How can we collect or estimate ESG data in emerging markets?

ESG Data vendors provide ESG data to investors and companies, covering a wide range of aspects.

- Greenhouse gas (GHG) emission
- Land, water, air pollutants, and waste disposal
- Natural resource and water use
- Revenue generated from each sector of a company's operations
- Fossil fuel reserves, power generation capacity and associated carbon metrics

ESG Data vendors may not offer sufficient coverage, especially in emerging markets. To address this challenge, how would you collect or estimate ESG data in emerging markets? You can choose any ESG data in any emerging countries or regions (e.g. GHG emission data in a country, water consumption in Southeast Asia, etc.)

GHG-disclosure rates for MSCI ACWI IMI constituents



MSCI ACWI IMI constituents' disclosure rates, as of respective dates. Source: MSCI ESG Research LLC



QUESTIONS ?

