50 CLIMACTS



THE SUSTAINABLE
FUTURE
BEGINS IN
PARIS

GREEN BONDS CLIMATE

CARBON FOOTPRINT

LABELS & STANDARDS



GREEN FINANCINC

ESG STRATEGY RESEARCH & SURVEYS

SOLUTIONS

"Now more than ever, it is crucial for the financial sector to step up its contribution to the fight against climate change. The 50 ClimActs of Finance for Tomorrow are a great example of the ambition of the Paris Financial Center to be a global leader in terms of green and sustainable finance."



Gérard Mestrallet



Finance for Tomorrow: 50 ClimActs and a lot more!

Since the Paris Agreement was adopted in 2015, the Paris Financial Center has been strongly involved in financing the transition to a low carbon and inclusive economy. Finance for Tomorrow is the incarnation of this movement. This initiative launched in June 2017 by Paris EUROPLACE gathers the most committed actors on this issue.

The ClimActs you will find here are showcasing this dynamic as they mark concrete milestones in the alignment of the economy and the financial system with the 2 degrees objective. These 50 ClimActs illustrate the momentum carried by Finance for Tomorrow to promote and disseminate best practices.

We have already performed concrete actions to differentiate the Paris Financial Center, to reinforce synergies between public and private actors and to foster the European and International outreach of Paris as a green and sustainable financial center:

- > Finance for Tomorrow published a comprehensive analysis of the Intermediary Report of the EU High Level Expert Group (HLEG) on Sustainable Finance in which five of its members participate.
- > What common project could be a better illustration of public-private cooperation than the co-organization by Finance for Tomorrow and the Ministry for the Economy and Finance of the Climate Finance Day on December 11, 2017?

➤ At the international level, Finance for Tomorrow plays a leading role in the launch of the Network of Financial Centers for Sustainability.

In 2018, our working groups will deliver further results, which I hope will allow in the months and years to come to multiply the emergence of ClimActs that will make the Finance for tomorrow: a finance that favours long term solutions, an innovative and digital finance connected to the real economy, a finance mindful of its environmental and social impacts, a finance that invests in the future!

Philippe Zaouati

CHAID OF FINANCE FOR TOMODROW



\$2 BILLION EMERGING MARKET GREEN BOND STRATEGY

In 2017, the International Finance Corporation (IFC) partnered with Amundi to unlock massive amounts of private funding to finance climate-related projects in emerging countries. The \$2bn strategy will simultaneously stimulate green bond demand (through the Fund) and supply (through a support program to emerging market financial institutions) for climate finance in emerging markets. This game-changing project combines financial expertise and innovation in line with the COP21's goals.

www.amundi.com



1 GREEN, SOCIAL AND SUSTAINABILITY BONDS*

For many years Crédit Agricole CIB has been committed to sustainable development and fight against climate change, whether in setting up best practices (founding member of the Equator principles, co-writer of the Green Bond Principles, a methodology used to quantify carbon emissions with the ADEME etc.) or in its financings granted to economic players – corporates or financial institutions – in particular through the application of sector policies.

*From January 1, 2017 to today (Bloomberg source)

www.ca-cib.f



edf

MORE THAN €2.5 BILLION OF NEW RENEWABLE INVESTMENTS financed with proceeds from EDF's Green Bonds in June 2017

EDF has been for several years at the forefront of developing innovative sustainable financing solutions. The Group pioneered benchmark Green Bond corporate issuance in November 2013 and has now issued €4.5 billion – in EUR, USD and JPY – dedicated to new renewable power investments. Also, EDF recently signed with ING a €150 million bilateral Revolving Credit Facility with an interest rate dependent on EDF's sustainability performance, as assessed by independent ESG rating agency Sustainalytics.

/x/x/ edf fr

€5,25 BILLION Green Bonds emitted by ENGIE to date, of which €2,75 billion only in 2017

To support its ambitious clean development strategy in renewable energy and energy efficiency, ENGIE had emitted a 2,5 billon € green bond in 2014. With its 2017 emissions, ENGIE became the largest corporate green bond emitter in the World, thus confirming its commitment to play a leading role in green finance development.

www.engie.com



€2.8 BILLION OF GREEN BONDS ISSUED

Paris Region is the first local authority in France for the amount of green bonds issued

This policy improves the region's attractiveness by sustaining investments in transport, education, research and the environmental transition. One example is the extension of the RER train to the west (EOLE) which will directly benefit 1.4 million Paris Region residents by the mid-2020s. Ile de France was the first local authority to issue green bond in 2012.

www.iledefrance.fr





©7 BILLION SOVEREIGN GREEN BONDS

Bringing together the best of sovereign bond liquidity and the best practices in the green bond market, Agence France Trésor issued a landmark 7bn 22-year maturity sovereign green bond in January 2017

The bond was the biggest sovereign green bond ever issued. It also brings unquestionable improvements in the reporting process, especially through the creation of an independent expert committee on impact evaluation.

www.economie.gouv.fr



E2.65 BILLION: 3 GREEN BOND ISSUED in less than 12 months (maturity of 15. 17 and 30 years)

SNCF Réseau Green Bond program is mainly dedicated to the modernization of the day-to-day railway network. Our objective is to become a leader on the Green Bond market not only in terms of volume but also in terms of standards:

- Our program is compliant with GBP and CBI standards and certified by Oekom research;
- We have developed a specific methodology for assessing the carbon footprint of infrastructure projects, in partnership with Carbon 4;
- The allocation of funds has been verified by KPMG.

www.sncf-reseaเ

vigeoeiris

41 SECOND PARTY OPINIONS

issued since COP21

Since COP21, Vigeo Eiris has issued 41 second party opinions on green or social bonds and loans, released by 28 issuers (corporate, banks and sovereign) coming from 13 countries. This represents around 24 billion euros aiming at financing climate mitigation and adaptation. Numerous bonds have focused on low carbon transition through renewable energy or green buildings projects. Vigeo Eiris' exclusive and integrated due diligence enables to assess both issuer and issuance, providing a level of assurance on the responsible nature of the bond.

www.vigeo-eiris.com

CLIMATE POLICY



500 000 TONS OF CO2 saved by 2020 related to Aviva green investments

Avivaplaysanactiveroletosupportthetransition towards a low-carbon economy. We invest in green infrastructure with a £2.5 billion commitment by 2020 and an associated carbon savings target of 500 000t of CO2. We consider active stewardship as a key responsibility as investors. Each year we undertake around 100 engagements with companies to encourage reporting and adoption of more robust climate strategies. Since 2015 we voted for 231 green related shareholder proposals and against 148.





AXA's position regarding climate change is not only to adapt, but to take advantage of its privileged position to provide

Our recent commitments include the following: Coal divestment (500M€) Green investments (target to reach 3Bn€ by 2020), Art. 173/TC-FD-related analysis, ESG integration, Outreach on sustainable finance (chair of the TCFD/ HLEG). Shareholder engagement (Aiming for A. Climate Action 100+) and various partnerships (UNPSI, UNPRI, UNISDR, World Bank, Montreal Pledae...).



AXA



MONITORING COMMITTEE FOR CLIMATE RISKS established by Banque de France and ACPR

Following the Government report to the Parliament entitled «The banking sector facing climate change», published in early 2017, a monitoring committee was set up by Banque de France and ACPR. Its role is to sensitize banks and insurance companies so that they develop tools to manage adequately climate change-related risks. The meetings organized by the committee brought together French institutions accounting for more than 95% of banks' total assets, 70% of life insurers' technical provisions and 61% of non-life insurers' technical provisions.



EXCLUSION OF NON-CONVENTIONAL HYDROCARBONS

After exiting the financing of coalmines and coal-fired power plants in 2016/2017, BNP Paribas committed in 2017 to no longer finance companies and infrastructures (pipelines and LNG terminals) primarily dedicated to non-conventional hydrocarbons, namely oil and gas from shale, and oil from tar sands. The Group will also not finance any fossil fuel project in the Artic region. These measures are part of its commitment to align its financing in the energy sector with the 2°C scenario of the IEA.



ALIGNMENT WITH A 2°C SCENARIO supported by a low carbon strategy

In 2016, HSBC France carried out a first assessment of how aligned its energy and transport loan books are with IEA's 2°C scenario. The energy mix confirms the impact of its energy policy, with no financing of coal. The electricity mix, with a CO2 emissions factor of 97g CO2/kwh, is already below expected levels for 2030-2035. The air transport emissions factor is of 132g CO2 per passengerkilometer, in line with the IEA's 2°C scenario by 2020. More carbon intensive sectors are being assessed.

www.hsbc.fr





CITIZEN EMPOWERMENT **AND ARTICLE 173**

WWF believes that it is essential to empower citizens to take control over the assets they have entrusted to institutional investors. This is why WWF has decided to have a closer look at climate-related disclosures provided by French insurance companies in response to legal requirements under Article 173. The objective was to ensure that the voices of retail investors are heard and that institutional investors provide information that remains simple and understandable for non-expert individuals.



CLIMATE ALIGNMENT TEST FOR FINANCIAL PORTFOLIOS with Kenler Chayraux, Frankfurt School

with Kepler Chevreux, Frankfurt School, WWF, CDP & CBI

The test measures alignment of capital investments, made by companies which sit in specific investment funds, with the IEA 2* scenario. It has been used on 2,000+ portfolios, representing over €3,000bn AUM. Testing is made possible by a database linking energy assets to businesses, which covers >95% of CO2 emissions in these sectors: fossil fuels, renewable energy, automotive production, aeronautical & maritime industries, cement & steel.

www.2degrees-investing.org

Beyond Ratings Sovereign Risk Matters

SOVEREIGN BONDS PORTFOLIO MANAGEMENT

builds on Beyond Ratings key innovation

Beyond Ratings' proprietary Carbon Liabilities Assessment Integrated Methodology (CLAIM©) derives the temperature equivalents of sovereign bond portfolios. Major investment banking, infrastructure & insurance actors already benefit from this advanced indicator. Building partly on CLAIM®, the Worldwide Climate Policy platform offers an opensource online simulation tool of international climate negotiations for any world average temperature increase target, including the 2°C Paris Agreement goal.

www.beyond-ratings.com



MORE THAN 5,000 COMPANY CARBON FOOTPRINTS

with Carbon Impact Analytics

carbone 4

Since 2014, Carbone 4 has developed two methodologies specifically designed for the financial sector (Carbon Impact Analytics and Climate Risk Impact Screening) to measure transition risk and physical risk of investment portfolios. This work is the result of 10 years of experience in carbon accounting and is based on research carried out in collaboration with professional and academic partners.

www.carbone4.com



TAILOR-MADE CLIMATE AND CARBON STRATEGIES which create economic, environmental and social values

for businesses and territories

Benefits generated over last two years are: 4 MtCO2 eq of GHG emissions offset / €23 million invested in carbon offsetting / insetting projects / 6700 eq jobs created / € 2 billion of economic benefits delivered. Our experience proves that carbon neutrality is a genuine performance and competitive lever for market participants today.

www.eco-act.com



INNOVATIVE METRIC FOR ASSESSING THE CLIMATE RISK

of an equity portfolio

The key question for an asset owner (asset manager) is: how assessing the financial impacts of environmental issues on the arbitrage risk/return on an asset class, a single bond or stock? ICARE&CONSULT designed an innovative methodology which tries to quantify the financial risks associated with climate for european equities portfolios. The idea is to add one metric to the classical tools at the disposal of the portfolio manager in order to construct his portfolio within his investment universe.

www.i-care-consult.com



GREEN FINANCING



€3 BILLION brought by French private equity professionals TO CLEAN TECH COMPANIES in 6 years-time, from 2010 to 2016.

In 2015, the French private equity companies launched the "Initiative Carbon 2020" (iC20), the first long term approach allowing private equity investors to manage and reduce the greenhouse gas emissions of their portfolio companies. The iC20 signatories have pledged to take action to contribute to the COP21 objective of limiting global warming to 1.5°C.

www.afic.asso.fr



€200 MILLION AND ALREADY 150+ PROJECTS financed by Eiffel Energy Transition fund

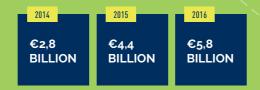
Eiffel Energy Transition responds to the need of the energy transition sector with an original offer, by offering short term debt to developers while they await long term funding for their projects. The Fund is sponsored by the EIB and the ADEME. Since its launch in April 2017, the Fund financed more than 150 energy transition projects. Eiffel Investment Group manages 1.3 billion euros, and specializes in high value-added investment strategies in debt and equity.

www.eiffel-ig.cor



DP-TO €15 BILLION TO FINANC ECOLOGICAL AND ENERGY TRANSITION over the year 2014-2017

By the end of 2016, 13 Billion € of loans and investments where already decided and allocated to project financing or SMEs.Caisse des Dépôts' saving funds' division launched new loan products and reached a very high level of activity, as well as Bpifrance and CNP Assurances financing activities dedicated to ecological and energy transition. This unprecedented mobilization allowed Caisse des Dépôts Group to significantly raise its annual ecological and energy transition financing since 2014:



www.caissedesdepots.f



PARIS GREEN FUND

a territorial private equity fund for ecological transition

With an investment target of €M 150, the fund will take minority shareholdings in innovative SMEs with high potential, deploying activities in sustainable buildings, housing, urban mobility, green energy, improved air quality, innovative waste management and climate protection. In Nov. 2017, Paris will also issue a new €M 300 Sustainability Bond.

www.paris.fr



FFSHORE WIND FINANCING

Since the COP21, Natixis has expanded its presence in the financing of renewable energy and has notably strengthened its position as a leading player in the Offshore Wind power financing market. Over the last 2 years, Natixis has financed and refinanced Offshore Wind projects for a total capacity of 3255 MW.

www.natixis.com



€485 MILLION FUND FOCUSING ON ENERGY TRANSITION PROJECTS ACCROSS EUROPE

in partnership with CNP Assurances

The Meridiam Transition Fund has backed several flagship and territorial projects including biogas, smart city and innovative renewables. In Africa, Meridiam has been at the forefront of the development of affordable green energy, inter alia closing 2 first-of-their-kind utility-scale PV projects in Senegal and launching a platform to distribute offgrid solutions across Africa.



GENERATING POWER FOR 410,000 EUROPEAN HOUSEHOLDS by blowing in the wind

Societe Generale arranged the funding for the largest wind farm in the world, Dudgeon, located off the coast of Norfolk, UK. Completed by the end of 2017, the project will generate electricity for 410,000 British households and replace 893,000 tCO2/y. This is the 1st offshore wind transaction in which Societe Generale has acted as both advisor and lender, confirming its role as European leader in financing for wind farms.

www.societegenerale.com







800 000 CORPORATE SITES MONITORED on climate risk exposure

Four Twenty Seven mapped 800 000 corporate facilities globally and uses climate science models to assess the likelihood of them being affected by climate hazards such as heat waves, floods and cyclones. These big data analytics help investors identify which companies in their portfolio are most vulnerable to the impacts of climate change globally. This is the first time the physical location of corporate sites and their exposure to climate-related events have been mapped for investment purposes.

www.427mt.com



«LOW CARBON» VIRTUAL MANAGEMENT PLATFORM

created in collaboration with Cedrus AM and amLeague

Compared to what could be called a 4.0 call for tenders, this use of new technologies has made it possible to develop and identify in real time the best strategies of the managers. On this basis, ERAFP has since invested 100 million euros in funds developing an approach to fight climate change.

www.rafp.fr



LOW CARBON SOLUTIONS

Members of Afep launched two initiatives in coordination with the French authorities

2015-2017

Selection of 20 large scale urban pilots in France 100 voluntary commitments

2017

commitments from 33 companies on circular economy

Our target on large scale urban pilots in France is to build new low carbon solutions thanks to: better communication between local authorities and companies in the public procurement process, and to better cooperation between large companies from complementary sectors: building, infrastructures, energy, environment, digital, services and finance. We also aim at boosting low carbon solutions through circular economy.

www.afep.com



GREEN SUPPORTING FACTOR

French Banking Federation supports an "appropriate prudential approach" to financing and investing in the energy transition. This should mean lower capital requirements for financing and investing in these assets. For that, FBF is asking for the introduction of a supporting factor applicable to capital requirements for exposure to assets that support the energy transition. The targeted assets could be determined thanks to an EU taxonomy based itself on the Climate Bonds Initiative terminology.

ww.fbf.fr





€16 MILLION FOR THE AGROECOLOGY TRANSITION

Moringa, an impact investment fund dedicated to agro-forestry, concluded 3 deals for a total amount of €16m in 2017. €5.5 were invested in Tolaro, an organic & fair-trade cashew processing company in Benin, working with more than 7'000 farmers. €5.5 have been invested in Kenya, for the development of smallholder timber plantations associated with local processing (Asante). Floresta Viva in Brazil (€5m) is developing a unique model of organic & sustainable heart of palm, restoring the Mata Atlantica.

www.moringapartnership.com



EUROPEAN PLATFORM DEDICATED TO NATURAL CAPITAL INVESTING

After developing climate friendly investment solutions for equities, fixed income and infrastructure investing, Mirova, Natixis Global Asset Management's affiliate dedicated to responsible investment, has expanded to natural capital. Through the inception of the "Land Degradation Neutrality" strategy in 2015 and the acquisition of Althelia Ecosphere in 2017, Mirova has created a European platform dedicated to natural capital investing, Mirova targets €1 billion under management in natural capital by 2022.

/www.mirova.com



70 PARTNERS AND CONTRIBUTORS committed to TWI network since 2015

Terrawatt has developed a network of more than 70 public and private partners around the world to jointly define a transparent framework based on common regulations, standards and guarantees for a global and equitable market for renewable electricity. This market will allow the emergence of a new asset class financing the large-scale energy transition. By joining this project, the actors of the Paris Financial Center are positioning themselves as leaders of a new green finance.

www.terrawatt.org

RESEARCH & SURVEYS



A PRACTICAL GUIDE ON ESG REPORTING for asset managers

Further to actions taken by AFG relating to COP 21 (publication of some transparency principles regarding the presentation of the methodology used to calculate the carbon footprint), AFG has developed a Practical Guide to help asset management companies report on the integration of ESG criteria into their investment policies. A new guide more focused on the concrete application of the transition law that will be published at the end of this year.

www.afq.asso.fi



FIR-PRI ACADEMIC RESEARCH AWARD

"Finance & Sustainability"

FIR, the French SIF along with PRI, recognizes every year European Academic Research excellence by awarding best masters, best PhDs, best pedagogical innovations and best published articles. FIR is also granting a PhD work every year in the field of Finance and sustainability. All European citizens and all academics in a European university are eligible. These recent years, awarded works covered Green topics like Climate Change, Divestment, Energy Transition, Green Building, etc.

www.frenchsif.or



200+ REFERENCE STUDIES on climate finance

I4CE's research team supports the integration of climate change by public and private financial institutions.

In 2017, we provided cutting-edge analysis on climate risks, on mainstreaming climate action into strategies and operations, and on green bonds. Each year, we publish the landscape of climate finance in France, the reference study that supports decision making on financing instruments, the economic model of projects and the role of public and private actors.

www.i4ce.org



€10,25 MILLION to sustainable research

Since COP21, the Louis Bachelier Institute and its partners have mobilized to support research of excellence in the field of sustainable finance leading to the funding of 12 research programs involving more than fifty researchers and five French academic institutions. The resources committed to the benefit of research represent € 10.25 million and will strengthen the French scientific capacity in the field of financing and the economy of climate change.

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in investments

Following its commitment to sustainable finance at COP21, Orse published in December 2017 a practical guide on the integration of environmental, social and governance (ESG) criteria in investments, financing and services towards SMB. The aim of this new publication is to describe how the financial sector has expanded its analysis from large groups to SMB (56.6% of French companies in 2015 - source Insee 2017). This sector assesses how SMB consider the issues of climate change.



www.orse.or



«LOW CARBON ECONOMY INDEX»: a yearly study

The purpose of our model is to calculate carbon intensity (tCO2/\$m GDP) for different countries and the world, and the rate of carbon intensity change needed in the future to limit warming to two degrees by 2100.

www.pwc.com



ESG STRATEGY



28 % OF AGIPI'S NEW **SUBSCRIPTION** under discretionary management HAVE ESG OPTION

AGIPI answered to the demand of its members who want to have a positive impact on the AGIPI launched the first impact investing offer Available on retirement and saving contracts, it enables everyone to add extra-financial values to their savings. By having access to the most responsible hedge funds, one can target profitable firms and push them to take the planet.

www.agipi.com



4 NEW ESG INDICES, MORE THAN €20 BILLION **GREEN BONDS LISTED**

- > Launch of ESG Indices encouraging issuers to have a virtuous approach to attract investors
- > ESG performance improvement tools such as governance coaching integrated into the
- > Listing ecosystem strengthening (peers and
- Green Bond franchise: 28 issuers and 45 green bonds (including 13 in 2017); total value: € 26 billions
- Cleantech franchise: 58 issuers with a capitalization of more than € 40 billion

www.euronext.com





100% OF OUR ANALYSTS TRAINED ON ESG ANALYSIS in 2017

- > ESG has become 100% mainstream; over 18 months, extra-financial analysts have trained financial analysts, now fully independent.
- > We obtained 2 SRI labels for our funds.
- > Following the Article 173, Groupama AM going beyond simply measuring the carbon footprint of its portfolios: first, by setting up new, more forward-looking indicators that reflect the companies' positioning towards the energy transition; then by formalizing its

PLATFORM OF EXCHANGES BETWEEN INVESTMENT AND **SUSTAINABILITY OFFICERS** ABOUT ESG AND CLIMATE **INTEGRATION** into investment strategies of insurance companies

Insurers representing at least €1600 billion of assets already have an ESG-climate investment policy. A working group bringing together people from Sustainability and Investments Departments was created to increase this integration of ESG and climate criteria in the allows members to share best practices and discuss common challenges and solutions. It is at the initiative of a new forum between investors and issuers with the aim to increase sharing on climate reporting.

www.ffa-assurance.fr



SRI STANDS AT 80,5% OF TOTAL **PORTFOLIOS** when it should represent at least 75%

Back in 2011, MAIF did its first investment in infrastructure. Today, the group devotes about 1.8% of the portfolio (~ €325mln) to financing the energy transition, through green bonds, green label buildings, specialized funds etc. This amount is set to grow as investment opportunities towards climate change arise.

www.maif.fr





LABELS & STANDARDS



Contribution to the worldwide publication of the new sustainable procurement ISO STANDARD (ISO 20400)

Through its decisive contribution to the construction of a new international standard, A2 Consulting, acting as AFNOR representative, helped establish guidelines for industrial companies and investors, increasing the relevance and efficiency of supply chains risk management and related CSR impacts analysis. A2 Consulting initiative can help establish new and effective connections that hardly exist today between two different worlds: investment and procurement.





Finance Innovation

+20 GREEN FINTECH **CERTIFICATED** since COP21

FINANCE INNOVATION is the cluster for innovation in the French financial sector, has directed concrete actions to accelerate the creation and development of green innovative solutions devoted to environmental challenges.

- Certificate green Fintech in order to apprehend the potential for delivering sustainable development and green finance
- Promote and support green Fintech ecosystem locally and internationally

PROPARCO

AFD'S GREEN FINANCE LABEL

20 new African banks have been participating in the SUNREF initiative since COP21

To support local financial institutions in climate transition, more than 600 million euros have been disbursed by AFD to finance green investments in key sectors. For its part, Proparco, AFD's subsidiary serving the private sector, dedicated 303 million euros to finance green initiatives through financial institutions, corporates, infrastructure vehicles and funds in 2016.















TEEC LABEL for energy and ecological transition for climate launched by the French Government in 2015

The label enables savers and investors to allocate capital to low carbon transition related investments through equity, fixed income, infrastructure or private equity fundsAs of October 2017, 15 funds have successfully applied for labelisation, representing €1.9 billion.



+300 ESG LABELS

awarded in Europe

In 2016, the TEEC label launched by the French Ministry of Environment has strengthened Novethic expertise in the creation, promotion and audit of ESG label. The TEEC label certifies the orientation of investments towards green economy. Since the creation of its 1st European SRI label in 2009, Novethic Research Centre has developed various innovative certification schemes such as the Novethic Green Fund label, The FNG label in Germany.



SRI LABEL launched in 2015 by the French Government who delegated to AFG and the French SIF (FIR) its promotion

The label formalises best practices with regards to SRI products by ensuring that the management of these products is based on sound methodologies with strong transparency and quality information requirements. As of October 2017, 22 asset managers successfully applied for the labelisation of 119 funds representing €23 billion.



















































































































OBSERVERS



