2° INVESTING INITIATIVE

ANNUAL ACTIVITY REPORT 2017
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Cover picture: Tricia Jamison
2017 PROJECTS
The European Commission established a High-Level Expert Group on Sustainable Finance (HLEG) in December 2016. Stanislas Dupré – founder and global director of 2°ii – is one of 20 members of the HLEG, which comprises senior experts from civil society, the finance sector, academia and observers from European and international institutions.

The group was mandated to provide advice to the Commission on how to steer the flow of public and private capital towards sustainable investments, identify the steps that financial institutions and supervisors should take to protect the stability of the financial system from risks related to the environment, and deploy these policies on a pan-European scale.

The participation of Stanislas Dupré in the High-Level Expert Group was fundamental to the development of three of the 8 key recommendations that the HLEG will now provide to the European Commission as part of their mandate to develop an EU roadmap on sustainable finance.

Stanislas Dupré and his team were able to contribute to place the following issues at the top of the agenda:

1. Integration of sustainability issues in the supervisory mandate of the European Supervisory Authorities (ESAs) and the extent of the horizon of risk monitoring.

2. The enhancement of the EU retail investors strategy on sustainable finance including investment advisory practices and disclosure of climate-related issues.

3. The upgrade of disclosure requirements starting with climate change issues by endorsing and implementing the recommendations of the Task Force on Climate-related Financial Disclosures at EU level.

The publication of this HLEG report is therefore a milestone in the mainstreaming of ideas that used to be limited to our publications and those of sister organizations - most of them being also among HLEG members and observers. It will call for an evolution of the role and mission of 2°ii as an organization.
2017 saw the SEI Metrics project nearing the finish line. While 2016 was marked by our outputs, 2017 put some of the project partners at center stage. Highlights were the expansion of the model to corporate bonds and credits, the application of the assessment methodology to equity investment funds, insights on the complexity of asset ownership networks, and most importantly, the first year of a newly created working group under the International Organization for Standardization (ISO) for the development of a new standard for assessing and reporting investments related to climate change (ISO 14097).

The model now involves a comparison of key sectoral and technology trends across the energy (oil, gas, coal), power (coal, gas, nuclear, hydro, renewables), transport (automotive, shipping and aviation) and industry (cement and steel) sectors. It compares the exposure of a portfolio to both current and planned capacity, production, and investment plans to 2°C scenarios, mapped to specific asset classes and geographies – with geography and stock market specific calculation outputs. More information on the model can be found at [http://seimetrics.org](http://seimetrics.org). The model development was funded by the EC H2020 program as part of the Sustainable Energy Investing Metrics project.

This project has long been the flagship project of 2°C Investing Initiative and has helped to mobilize many additional funds for projects that extend the scope of this initial project, helping to secure the long-term viability of the method developed. In 2018 this project will be finally wrapped up (project end is February 2018) with the official launch of the free online portfolio assessment tool on transitionmonitor.org.
The PACTA project was launched in 2017 to facilitate the transparency and accountability of EU financial institutions regarding alignment with climate goals and related financial risk.

During 2017, bilateral briefings were completed with supervisors, ministries and central banks from 6 countries: the United Kingdom, Switzerland, the Netherlands, Sweden, Germany and Australia. In conjunction with this process, portfolio testing was completed across 3 asset classes with at least 400 regulated entities.

Work was conducted specifically with two central banks who have both agreed to disclose the findings in 2018. Further work will be conducted in 2018 with other banks in the Netherlands and Sweden. This will expand to investigate the alignment of their credit portfolios in addition to the corporate bonds and equity.

Within Switzerland, 90 parent institutions were tested in conjunction with the Federal Office for the Environment. This equated to approximately 70% of all assets under management of regulated Swiss pension and insurance funds. A Meta Study was published, entitled “Out of the Fog”, which analysed the alignment of an aggregated portfolio of Swiss pension funds and insurance companies and compared them to the global stock market and economy.

A sample output is presented above: the growth in gas production over the next 5 years is compared to the IEA scenarios to give an understanding of how the market is trending.

The code being developed in this process is publicly available at http://github.com/2DegreesInvesting/PortCheck

Additionally, open webinars related to the aforementioned projects were held during 2017 and are available online at www.transitionmonitor.com
MOBILISING RETAIL SAVINGS FOR THE ENERGY TRANSITION

Retail investors hold significant amounts of assets and are therefore an important decision maker for the allocation of financial resources. Mobilising retail investors to take investment decisions in line with international climate goals could be an important factor in closing the funding gap to meet emission reduction goals.

Based on 2016 background research, the project set out in 2017 to provide detailed policy recommendations on how to lift regulatory barriers to the mobilisation of retail investors. In order to provide an in depth analysis of current practices as well as the impact of the regulatory framework, information was gathered in over 50 interviews with financial sector associations, banks & insurances, asset managers, regulators and consumer groups. In addition 16 “client meetings” were organised in four countries to test the service clients get when they ask for investments in climate-friendly assets.

“Non-financial message in a bottle” report (Link): The report’s objective is to formulate recommendations to reform the investment advice in line with Europe’s long-term funding needs. It is divided in three parts; the first part aims to provide a detailed analysis of the status quo. It starts by setting out the current demand for green savings products according to existing surveys. It then analyses in detail the prevalent structure of retail investment products with the aim to see if the current process is able to capture the demand. It concludes with an overview of how current trends of automatization and increasing use of Fintech are likely to impact investment advice processes. The second part provides a regulatory analysis of the MIFID II directive as well as the new PRIIPS regulation in order to assess the potential impacts that this new regulatory environment may have. The third part provides recommendations to public and private sector stakeholders on how to better take into account the non-financial investment objectives in investment advice.

Remarkable uptake of the recommendations of this project The report was launched in Paris, discussed in an expert workshop in Brussels and presented to officials from the European Commission (DG FISMA). Many of the recommendations of this report were integrated in the final report of the EC High Level Expert Group for Sustainable Finance (see specific page). In early 2018 they were also taken up by the European Commission in its Action Plan for Sustainable Finance.

A work stream to be continued: The early success of this project has triggered the need for detailed follow up work both in the area of the regulatory framework, as well as regarding the recommendations on private sector initiatives. In 2018 a new project funded by the German government will be launched to build a pilot robot adviser for retail clients, able to assist with specific client wishes related to climate-friendly investments.
The Energy Transition Risk project (ET Risk) is a project involving S&P Market Intelligence, S&P Dow Jones Indices, Oxford University, Kepler-Cheuvreux, CO-Firm, I4CE, and the Carbon Tracker Initiative. The project seeks to develop the toolbox of energy transition risk assessment – reference scenarios for financial analysis including a 2°C scenario analysis, ET risk data, as well as financial models. The project is funded by the European Commission H2020 programme.

TRANSITION SCENARIOS

The consortium will develop and publicly release two transition risk scenarios, the first representing a limited transition extending current and planned policies and technological trends (i.e. IEA ETP RTS trajectory), and the second representing an ambitious scenario that expands on the data from the IEA ETP 2DS.

COMPANY & FINANCIAL DATA

Oxford Smith School and 2° Investing Initiative will jointly consolidate and analyze asset level information across six energy-relevant sectors (power, automotive, steel, cement, aircraft, shipping), including an assessment of committed emissions and the ability to potentially ‘unlock’ such emissions (e.g. reducing load factors).

VALUATION AND RISK MODELS

a) ClimateXcellence Model – The CO-Firm’s scenario risk model covers physical assets and products and determines asset-, company-, country-, and sector-level climate transition risks and opportunities under a variety of climate scenarios. Effects on margins, EBITDA and capital expenditure are illustrated under different adaptive capacity assumptions.

b) Valuation models – Kepler Cheuvreux. The above impact on climate- and energy-related changes to company margins, cash flows, and capex can be used to feed discounted cash flow and other valuation models of financial analysts. Kepler Cheuvreux will pilot this application as part of their equity research.

c) Credit risk rating models – S&P Global. The results of the project will be used by S&P Global to determine if there is a material impact on a company’s creditworthiness. S&P Dow Jones Indices, a S&P Global Division, will explore the potential for developing indices integrating transition risk

d) Assumptions on required sector-level technology portfolio changes are aligned with the Sustainable Energy Investment (SEI) Metrics, which developed a technology exposure-based climate performance framework and associated investment products that measure the financial portfolio alignment.
Research on time horizons continued to play a significant role in the 2° Investing Initiative’s work in 2017. Our research on time horizons was initiated by what Mark Carney, the governor of the Bank of England called the ‘tragedy of the horizon’; risks that are material for a physical asset (e.g. power plant) or a company (e.g. electric utility) are not necessarily material for their investors and not necessarily priced in by financial analysts.

Our ‘Tragedy of the Horizon’ research project has three main objectives:

1. Informing the debate by quantifying time horizons across the investment chain;
2. Identifying the unintended consequences of risk management practices focused on the short-term;
3. Developing responses in partnership with key stakeholder groups such as investors and financial policymakers.

In February 2017, 2°ii published the final reports on the time horizons of equity research and portfolio turnover which was initiated in 2016 and supported by the Generation Foundation. To complete the research into the disclosure of time horizons, the European Investment Bank (EIB) supported 2°ii to publish a related report in September 2017.

The report summarized the time horizon of disclosure across key financial and non-financial indicators, indicating that disclosure is even more short-term than equity research, with disclosures frequently limited to one year forward-looking information. Moreover, scenario analysis is a marginal part of disclosure, only found in 6% of financial disclosures. The report involved the research of a sample of over 100 annual reports as well as reviews of sustainability reports and other disclosure avenues, and Bloomberg disclosure information. The gap between risks, analyst guidance and company guidance is shown below. The results highlight the challenge of addressing long-term climate risk issues in financial markets without long-term financial strategy and data.

<table>
<thead>
<tr>
<th>Morningstar DCF model median years to accumulate</th>
<th>25%</th>
<th>50%</th>
<th>75%</th>
<th>90% of Enterprise Value</th>
<th>Average length of explicit forecast period</th>
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Source: Sample of Morningstar DCF models (n=673); sample size by sector as noted on graph. Time horizon of forecasts from selected Bloomberg operational indicator fields (BEST and CEOT) for MSCIWorld constituents for FY1-FY10 (n=1,610). Sample size is number of available forecasts for each sector, with “zero-length” / non-existent forecasts removed for calculation of statistics.
ASSET-LEVEL DATA AND CLIMATE-RELATED FINANCIAL ANALYSIS: A MARKET SURVEY

In 2017, with the support of the French Environment Agency (ADEME), 2°ii completed a market research report on asset level data. The report made a critical contribution to helping market actors understand how to better access this information. This remains the most significant challenge for asset level data, given the significant transaction costs of having to access data from 6-10 different data providers.

Asset level data has increasingly become a key area for a potential solution to data limitations in financial markets, as highlighted by our research in 2016 “Climate Disclosure: How to Make it Fly” (Link).

Asset-level data report:
As part of this project, 2°ii analysed asset level databases across a range of sectors to identify their shortcomings and advantages, as part of the first attempt to systematically review existing asset-level data sources across climate-relevant sectors. The study reviewed over 35 data sources, including both commercial and open source databases. We attempted to gather information for each database, covering the method by which the data is procured, its coverage, specific data fields available (e.g. location, age, emissions), and accessibility and pricing issues.

The review covered data for the coal, oil & gas, power, aviation, shipping, automotive, cement, iron & steel, power, and real estate sector, including surveys, demos, subscription access, and online reviews. The output of the project was a 40-page research report (Link) and was also disseminated at 4 events in Europe and in the US.

The review highlights the significant opportunity that asset level data presents to the market. The data can now being integrated by financial supervisory authorities, governments, and financial institutions for the first time in the context of projects led by 2°ii. Asset-level data has also seen prominent discussion in the HLEG and the UK GFI working group on data and disclosure.
REPORTS, DISSEMINATION & PARTNERSHIPS
We published 18 reports in 2017, in partnership with over 20 different organizations in Europe and the United States, covering a wide range of issues, including financial policies, climate disclosure options, benchmarking financial portfolios to climate goals, the *tragedy of the horizons*, asset level data, retail investing mobilization, climate risk assessment and options for the FSB Task Force on Climate-Related Financial Disclosures.
In 2017, our team attended more than 100 events with over 4,500 participants, allowing us to grow our network and increase the number of subscribers to our newsletter.

Team members were invited to speak at 59 of these events, allowing us to disseminate our research and share our ideas with professionals all around the world once a week.

We also organized or co-organized 18 events.

2ii engages regularly with all key stakeholders, with over 1,000 bilateral meetings or calls in 2017. Of these, ~25% involved NGOs/think tanks, ~25% financial institutions, ~20 policymakers and international policy organizations, ~15% data and index providers/consultancies, and ~15% meetings or calls with project partners.

2° INVESTING’S WORLD MAP
MAIN PARTNERS

Governmental organizations

United Nations
Framework Convention on Climate Change

Financial institutions

Research, data providers & consultancies

NGOs and investors coalitions
The 2° Investing Initiative (French entity) is directed by a Board of Administrators elected by the members and represented by a Bureau (President and the Treasurer). Five categories of members are represented on the board (investors, NGOs, governmental organizations, research organizations, and individuals). The first board was elected in 2013. The US entity appointed a first temporary board in 2015, composed of individuals. The German entity launched in 2016 with a board of individuals. While in personal capacity, the board members reflect the range of stakeholders core to the work of 2ii (investors, NGOs, governmental organizations, research organizations and individuals). The three entities are affiliated: they implement the same work programme and pool their resources and incomes.

Members of the Board - France

Corrine Lepage
President

Stéphane Voisin
Treasurer

Alexandra Bonnet
CGDD
French Ministry of the Environment

Hugues Chenet
Co founder

Sylvain Vanston
AXA

Jean-Charles Hourcade
CIRED

Yann Louvel
BankTrack

Members of the Board* – United States

Clara Vondrich
Divest-Invest
Philanthropy

Gabriel Thoumi,
Climate Advisors

Stephen Freedman,
UBS Wealth
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Members of the Board* – Germany

Jakob Thomä,
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initiative

Karsten Löffler
Allianz Climate
Solutions GmbH
(ACS)

Matthias Kopp
WWF

Nicole Röttmer
The CO-Firm

Raphael Schöttler
German Finance
Ministry

*All members sit on individual capacity
In 2017, the team was composed of 13 full time employees supported by a cohort of close consultants, interns, advisors and partners depending on the project.

Stanislas Dupré, Founder and Executive Director of the 2° Investing Initiative. Previously, Stanislas Dupré was Executive Director of the CSR consultancy Utopies after a career as a consultant and R&D manager. Stanislas has been working on 2° investing topics since 2007, where he developed the first ‘financed emissions’ assessment methodology for banks and diversified portfolios (with Caisse d’Epargne, ADEME, WWF, Friends of the Earth). In 2010, he wrote a book on the role of financial institutions in the energy transition.

2017 TEAM MEMBERS

Jakob Thomä  
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Energy Transition Risk project

Valéry Lucas-Leclin  
Senior Advisor

Didier Davydoff  
Senior advisor

Julian Poulter  
Senior Advisor  
Energy Transition Risk project
2° Investing Initiative is a network composed of three affiliated entities: the Paris, New York, and Berlin-based affiliates. The three entities are non-profit, non-commercial and membership-based organisations. They are governed by independent boards of directors, but remain affiliated. Thus their governance, work program, as well as financial and human resources are pooled according to a network agreement. Below is an overview of the network’s global budget evolution since 2dii’s creation.

### INCOME

In 2017, 2dii network’s income increased by 7.5% from 2016. The share of regranting to partners (mainly in the context of H2020 projects) also increased, resulting in a slight decrease in 2dii’s internal budget. Overall, the 2017 budget is fairly similar to 2016 in terms of global structure.

The 2018 budget is expected to have a different structure to those of previous years due to the following changes:

1. Funding sources will be better balanced among countries, especially as our main funding will be coming from German governments in the future.
2. Funding sources in terms of different types of funders will also be better balanced thanks to a growth in national level funders (in comparison to EU research grants to France).
3. Regranting to partners will significantly decrease, resulting in an increase in the internal budget.
Resources breakdown

In 2017, the 2dii Network’s total budget was €2,928,000.

Our main funding source (70% of 2017 total income) came from research grants from the European Commission (H2020 project). From 2018 onwards, we expect this ratio to shift significantly to more funding from non-EU sources.

Despite their small share in the overall budget, memberships (4%) and operational funding (8%) are key for the 2dii network, as they fund overhead, research innovation, and fundraising.

Expenses breakdown

The main 2dii expenses in 2017 were staff costs (39%) and regranting to partners (39%). Other expenditures were similar to previous years, including travel (6%), data & subcontractors (5%) and overhead costs (11%).

In 2018, staff costs are expected to increase, while our regranting to partners will dramatically decrease.
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