



## Workshop on Data Collection for Long-term Investment – Summary of Discussions

10 May 2017

This document includes main takeaways of the Workshop on Data collection for Long Term Investment held on the 10<sup>th</sup> of May, as part of the G20/OECD Taskforce on Institutional Investors and Long Term Investment Financing. Objectives, proposed actions to the G20 and next steps for the G20/OECD Taskforce are also outlined

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## WORKSHOP ON DATA COLLECTION FOR LONG-TERM INVESTMENT 10 MAY 2017

### Objectives of the workshop, Proposed Actions and Next Steps

#### *Background and Objectives of the Workshop*

As part of the **G20/OECD Task Force on Institutional Investors and Long-term Financing (the “G20/OECD Taskforce”)** a **Workshop on Data Collection for Long-term Investment** was held on the 10<sup>th</sup> of May 2017. The workshop was open to Task Force members (G20, OECD, Asian Pacific Economic Cooperation (APEC), Financial Stability Board (FSB) and International Organisations (IOs) such as the World Bank Group (WBG), the Global Infrastructure Hub (GIH) and the European Investment Bank (EIB)) and selected private sector representatives part of the OECD Network on Long Term Investment<sup>1</sup>. The event builds on joint work of the OECD Directorate for Financial and Enterprise Affairs and the OECD Statistics Directorate and included interventions from Environment, Development and Cooperation Directorates and the International Transport Forum. In line with G20 objectives and policy action, the focus of the workshop was on data issues related to the promotion of the financing of long-term investment and on assessment of the impact of financial regulation on the financing of long-term investment (See Agenda in Appendix).

The discussion built on relevant work including proposals for potential research agenda and actions made in a **background note** circulated to participants OECD (2017): *“Addressing the Information Gap and developing infrastructure as an asset class: a Draft Agenda for research”*. The aim of this draft note is to develop proposals for addressing the main gaps in information focusing in particular on infrastructure financing and the role of private sector. The proposals build on earlier reports for the G20 developed in cooperation with other countries and international organisations (e.g. Canada, Italy and FSB, International Monetary Fund (IMF), WBG and Bank for International Settlements (BIS))<sup>2</sup>.

Topics of the workshop included:

- Data Gaps in Long-term Investment and G20 work
- Mapping the financing of infrastructure
- Investment Characteristics of Infrastructure as an asset class and Role of Institutional Investors
- Mobilisation of Private Sector Financing

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<sup>1</sup> This Network part of the OECD Long Term Investment project includes industry participants (investors, banks, corporates) academics and NGOs [see [www.oecd.org/finance/lti](http://www.oecd.org/finance/lti)]

<sup>2</sup> OECD (2015) *“Addressing Data Gaps in Long Term Investment: an Agenda for Research”* developed in cooperation with other countries and international organisations for the G20 (e.g. Canada, Italy and the BIS) and FSB, IMF, OECD, WBG (2014), *“Development of quantitative indicators of long-term investment finance”*

In the discussions it was recognised that several policy and industry initiatives have been launched to try to get a better understanding of infrastructure at the macro and micro level. Taken together, all of these data sources and methods may be applied to help closing the data gap in infrastructure.

### *Role of G20 and Suggested actions*

In particular, the G20 and the G20/OECD Taskforce could play a key role in helping advance the agenda for research on data gaps in long-term investment supporting sustainable investment in infrastructure and developing infrastructure as an asset class. Among suggested actions to be considered by the Taskforce and relevant IOs:

- Explore scope for analysis building on available national account data especially in OECD countries (similar to the ones made by Canada and Italy) and leveraging other international initiatives as the G20 Data Gaps Initiative and data collection initiatives on a voluntary basis.
- Propose econometric analyses to identify demand and supply factors for long term finance for infrastructure (i.e. the business cycle, capital expenditures, corporate credit risk, investors' risk aversion, banks' propensity to lend and funding conditions, regulatory developments, etc.)
- Mapping level of investment and financing channels for infrastructure including listing instruments and levels of public financial support
- Creation of a database of stock and flows of infrastructure project/firms at sector level using commercial databases
- Mapping infrastructure investment risk that the private sector is facing, considering investment evaluations and pricing
- Promote a definition of sustainable and quality infrastructure investment to facilitate data collection on sustainability and resilience factors in infrastructure investment.
- Promote standardisation and harmonisation of project documentation<sup>3</sup> and of approaches to infrastructure valuation and analysis
- Promote international infrastructure data collection, with the adoption of a template for a preferred set of information to be collected (macro and micro level), including quantitative data on historical cash flows and performance at the project level and qualitative data covering project characteristics and sustainability issues<sup>4</sup>.
- Beyond tracking of financial flows, develop common measures of the economic and development impact of these flows
- By coordinating measurement and reporting across governments, the private sector and development finance institution (DFIs), transparency and accountability will be increased addressing unintended consequences in regulation, while potential gaps and opportunities for private sector will be identified.

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<sup>3</sup> Building on GIH PPP Risk matrix.

<sup>4</sup> Building on current work developed by GIH, EDHEC, EIB and the OECD, and on note circulated to the G20 in 2015 on Addressing Data Gaps in Long-term Investment. Also of relevance the new software on project preparation SOURCE

- List governments and DFIs instruments and techniques to attract private sector financing in infrastructure (i.e. risk mitigation and blended finance)
- Creation of a framework on qualitative and quantitative factors to help governments to take stock of instruments available and better evaluate their performance.
- Promote the setting of objectives for using National Development Banks (NDBs) and Multi-lateral development banks (MDBs) balance sheets to catalyse private investment, taking also into consideration compliance issues related social safeguards etc; define measurements and criteria to assess the impact of initiatives that leverage private sector capital in infrastructure

*Next steps for the G20/OECD Taskforce*

Specific feedback is needed on next steps agreed at the Taskforce:

- Comments and feedback have been requested on the background note circulated to participants OECD (2015): *“Addressing the Information Gap and developing infrastructure as an asset class: a Draft Agenda for research”*. Based on discussions at the workshop and comments received a final report will be circulated to Taskforce delegates.
- Initial feedback is also requested on the joint OECD/European Investment Bank/Global Infrastructure Hub and Club of Long Term Investors *“Infrastructure Data Initiative”* a cooperative solution to data gathering and addressing data gaps presented in session III of the workshop. The Task Force agreed on the request by the Chair to develop of a plan for the launch of the project including the creation of a preferred template of information for gathering financial and non-financial data (i.e. qualitative information that captures social and environmental dimension) on infrastructure projects. This jointly developed project would be presented at the next Task Force meeting this autumn.

## SESSION I: NEW INITIATIVES ON DATA COLLECTION FOR LONG-TERM INVESTMENT FINANCING

### Objective of the session

The lack of consistent and comparable cross-country information on infrastructure investment has been an important barrier for more detailed empirical study of the dynamics in infrastructure financing markets. Policy and industry initiatives have been launched to try to get a better understanding of infrastructure investment at the macro and micro level using sources ranging from country budget offices and national accounts to commercial databases.

This session aimed at understanding the way the various data sources and methods may be applied to help closing the data gap in infrastructure investment building on existing initiatives and recent policy and industry work.

### Main takeaways

- **OECD Statistics Directorate** presented an overview of the state of national accounts data on long-term infrastructure investment. From a macro-economic perspective, national accounts data on infrastructure investment cannot be directly mapped to the specific sources of financing for each type of infrastructure. Investments and financing can only be combined for the total of (sub)sectors. **Gaps remain in national accounts data, when it comes to more details on types of investments, as the reporting of these data is not mandatory. However there is scope to do more building on nationally available data (which could be collected on a voluntary basis), especially in OECD countries, and other important initiatives, such as the collection of more detailed data on financing as part of the G20 Data Gaps Initiative.** *The G20 Data Gaps Initiative* is aimed at insuring a better availability of financial accounts and balance sheets, including more details on the sources of funding. The initiative's defined target is 2021; however, much progress is already been accomplished by countries.
- **Bank of Italy** presented a practical case study of the use of national accounts data in Italy (Gross Fixed Capital Formation) focusing on the analysis of financing of long-term investment and the impact of financial regulation<sup>5</sup>. The presentation highlighted the analytical challenges linked to assessing investment financing through national accounts. Actual trends in long-term investment financing are the combined effect of several factors such as: the business cycle, capital expenditures, corporate credit risk, investors' risk aversion, banks' propensity to lend and funding conditions, regulatory developments, etc. **To separately identify demand and supply factors, there is a need to resort to fully-fledged multivariate econometric analyses**
- **The OECD Secretariat stressed the importance of the use micro-data (at firm/project level) for long term financing pointing towards new datasets and private and public sector common interest driving the opportunity of collective action for data gaps.** Past proposals to the G20 at improving the availability and quality of information on long-term investment and recent developments were reviewed. Following the structure of the *Background Note* a research agenda on data gaps/analytical work on private sector financing of infrastructure, potential benefits and areas of work were also presented<sup>6</sup>.

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<sup>5</sup> Giordano, Marinucci, Silvestrini (2016), Banca d'Italia QEF, No 307

<sup>6</sup> OECD (2017): "Addressing the Information Gap and developing infrastructure as an asset class: a Draft Agenda for research"

## SESSION II: MEASURING PRIVATE SECTOR INVESTMENT AND MAPPING FINANCING CHANNELS FOR INFRASTRUCTURE

### Objective of the session

Measuring the level of investment is necessary for a greater involvement of the private sector in infrastructure which is essential to meet the infrastructure needs, ensure a better allocation of risks, and introduce a more efficient and competitive market structure. As financial market can support infrastructure in various ways, the challenge of mobilizing greater private sector financing for infrastructure implies a better understanding of the relationship between the participants in infrastructure financing.

The session was focused on the data and the actions needed to ensure a better measurement of the amount of private sector financing for various infrastructure sectors and a better mapping of the routes through which this investment is channelled.

### Main takeaways

- The **OECD Secretariat introduced recent analysis in the context of G20, on mapping of financing of low carbon infrastructure focusing on energy, transport and the renewable sectors**.<sup>7</sup> Using commercial databases, this work describes major trends in private financing for infrastructure and the different roles of private sectors and sources of finance that could support low carbon infrastructure across different phases (greenfield vs brownfield). It also examines the major factors hindering and helping private investment and sets out a range of instruments and transaction enablers that can be deployed to mobilize private finance. This builds on the *OECD Taxonomy of Infrastructure Financing Channels*<sup>8</sup>, linking the role of the private sector in infrastructure to the financing structure used in each sector (project vs corporate), the delivery models and governance of infrastructure (Public-Private Partnerships (PPPs) vs non-PPPs), and finally the financing mix (debt vs equity).
- The **International Transport Forum** reiterated the lack of adequate data as a key constraint to assess existing policies and be able to influence the levels and types of transport infrastructure investments. **No clear picture of how much public and private investment in transport infrastructure exist nor on how they have evolved overtime or on the level of depreciation** Available data sources provide only for an incomplete picture: with national statistics lacking enough disaggregation for more detailed analysis and policy insights, firm-level data (capex data) not readily available and difficult to identify investment by business lines and geographical coverage and project-level statistics more detailed but only on part of investments in infrastructure and not readily available (mostly commercial sources). **A study of infrastructure**

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<sup>7</sup> OECD (2017) “Mobilising financing for the transition” Chapter 7 of the report “*Investing in Climate, Investing in Growth*” launched 23<sup>rd</sup> May 2017, Berlin [www.oecd.org/environment/cc/g20-climate/](http://www.oecd.org/environment/cc/g20-climate/)

<sup>8</sup> See OECD (2015) A Taxonomy: [Infrastructure financing instruments and incentives](#) and [G20/OECD Guidance Note on Diversification of Financial Instruments for Infrastructure and SMEs](#), endorsed by G20 Leaders, September 2016

**commercial databases** allowed International Transport Forum (ITF) and DAF/INV to estimate the private financing for transport infrastructure and build a **link between the financing trends and the delivery models** of infrastructure projects; hence, **getting a sense of the drivers behind the dynamics of transport infrastructure investment after the financial crisis**<sup>9</sup>

- **Tracking infrastructure investment in developing countries is particularly difficult.** India's **Observatory Research Foundation (ORF)** showed the fragmentation of the Indian government's support packages that create an opacity regarding the real role of the private sector. Therefore, answering a simple question of what is public investment versus what is private investment is not an easy undertaking. India has suffered a significant decline in "gross fixed capital formation" – physical investment – particularly since 2013 and is now facing a bank's crisis. The government sees this as being a product of an over-dependence on a particular channel for infrastructure finance and is now trying to rapidly diversify the methods by which infrastructure is financed.
- **Investors consider country risk and political risk as a major barrier to financing of infrastructure and struggle to price it in their investment evaluations**<sup>10</sup>. A participant highlighted the fact that projects located in countries associated with low political risk are experiencing a very high demand, whereas other regions lack financing. Also, an intervention pointed out that the most sought-after investments face high competition amongst investors, with prices often bid up to high levels. Projects that are less attractive are those with higher political risks or problems securing a financing package attracting less market interest.

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<sup>9</sup> OECD (2016), Quantifying private and foreign investment in transport infrastructure using project-level data (see DAF/INV(2015)/REV1)

<sup>10</sup> The OECD is currently undertaking of political, commercial and environmental risks in infrastructure in Mexico, Peru and Chile, building on previous work in the ASEAN region.

## SESSION III: INFRASTRUCTURE AS AN ASSET CLASS

### Objective of the session

The availability of reliable data and information at project/firm level is of a paramount importance in order to encourage institutional investors' participation in infrastructure financing. Encouraging more transparency in infrastructure assets' pricing and risks allows investors to make a better informed evaluation of risk and returns opportunities. It also requires a better understanding of the role of infrastructure in institutional investors' strategic asset allocation and asset and liability process, as well as the extent to which the asset class could meet other objectives such as liability-driven investment or the enhancement of the asset owners' governance and alignment of interest.

This session addressed the actions needed to build a research agenda promoting a better definition of sustainable and quality infrastructure, the standardisation of project documentation and the infrastructure valuation and analysis methods, as well as data collection and benchmarking efforts.

### *Main takeaways*

- **The OECD secretariat presented updates on the Large Pension Funds Survey, looking at how much Institutional Investors are investing in infrastructure and trends in terms of allocation compared to other assets.** Retirement systems in the OECD – comprised of pension funds and public pension reserve funds held more than USD 30.2 trillion in assets. Considering the surveyed funds (i.e. 77 funds, USD 7.8 trillion) infrastructure investment in the form of unlisted equity and debt was USD 85.6 billion in 2014, representing 1.1% of the total assets under management<sup>11</sup>. The secretariat's presentation looked at development of infrastructure as an asset class addressing four key areas: asymmetry of information problem, investment mandate ambiguity, benchmarking of infrastructure investment, and the legal and regulatory aspects. It highlighted the challenges of defining infrastructure in comparison with other asset classes, the lack of data as well as its role in the strategic asset allocation process through suggesting an expected risk and return framework that would guide the discussions.
- **The European Investment Bank, the Global Infrastructure Hub, and the OECD presented a new “Infrastructure Data Initiative”** that intends to leverage existing information and initiatives (i.e. Ecole des Hautes Etudes Commerciales (EDHEC)) analysing and collecting infrastructure data including DFIs and private sector data. The initiative will materialise into a **centralised repository on historical long-term actual data on infrastructure at an asset level**, focused on developing economies. Practical next steps for the initiative are still to be defined.
- **Moody's echoed the Secretariat's focus on the importance of understanding different infrastructure financing structures** (project vs corporate) and **presented analysis on infrastructure debt default rates showing low risk for infrastructure.** At corporate level, corporate infrastructure (i.e. excluding municipal infrastructure) are more stable and credit loss rates are lower. At project level, project finance bank loans included low marginal default rates (levels consistent with single-A ratings) with high ultimate recovery rates, averaging 80%. Also projects face significant incremental risk during the construction phase and/or the commencement and ramp-up of operations. **The difference in structure (corporate vs project)**

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<sup>11</sup> See OECD (2016) [Annual Survey of Large Pension Funds](#)

**and changing risk level profile are particularly important in the current context where regulators are studying the potential for a better treatment of infrastructure under Basel and Solvency frameworks** (see Reference Material in Annex).

- **Environmental Social Governance (ESG) in Infrastructure: The Principles for Responsible Investment (PRI) outlined infrastructure investment characteristics** (i.e. unique risk linked to greenfield/development, the illiquid nature and reputational issues) **driving responsible investment** (i.e. long term thinking, role of regulatory environment, importance of due diligence). The PRI has recently launched a new work stream on infrastructure with the aim to clarify the meaning of responsible investment in the asset class and harmonising practices, guiding investors in the implementation. In particular PRI reporting framework for infrastructure includes fund placement documents, ESG issues in investment (selection, monitoring and post investment) and disclosure of ESG information.

## SESSION IV: INSTRUMENTS TO ATTRACT PRIVATE SECTOR FINANCING AND MEASURING MOBILIZATION

### Objective of the session

In order to attract private sector financing to developing countries better measurement and tracking of flows is needed. In addition, mobilising a broader range of investors in infrastructure will require the design of new financial instruments and forms of collaborations with traditional sources of capital.

The session explored different initiatives to measure the mobilisation of private capital, including the techniques and instruments available to governments when attempting to attract private sector financing in infrastructure. It focused on the role of DFIs, NDBs and MDBs in catalysing private participation in infrastructure and the measurement of this mobilization effort.

### Main takeaways

- **The OECD Development and Cooperation Directorate (DCD)** presented Development Assistance Committee (DAC) work on Official Development Finance (ODF) for infrastructure in the developing Asian region, outlining that **ODF by multilateral and bilateral development partners is only roughly 2% of total estimated US\$800-900 billion of current spending for infrastructure in the region**<sup>12</sup>. Furthermore, resources mobilised from the private sector by Development Finance Institutions and Multilateral Development Banks using financial instruments such as guarantees, syndicated loans, shares in collective investment vehicles, credit lines and direct investment in companies amounted to only 0.2% of total infrastructure spending. The presentation covered financiers of infrastructure in the region, top donors and recipient countries, sector breakdown, and financing gap and mobilisation from the private sector on a sectorial basis.
- **There are several initiatives tracking the size of the financial flows of private investment mobilization and cofinancing (i.e. OECD DAC, MDBs) taking different approaches and methodologies.** The discussion highlighted the importance of methodological issues and the urgency for a harmonised approach in measuring private sector mobilization finance. For example, MDB methodology currently covers a wider range of financial products than the OECD reports on MDB mobilization and differs in treatments of guarantees and attributions roles. Measures of the development impact of these flows, are also measured differently according to each institution established results measurement system.
- **The OECD Development and Cooperation and the Environment Directorates (“DCD” and “ENV” respectively) presented work on measuring private finance mobilised by official development finance interventions.** Aim of this work is to develop an international standard for measuring the amounts mobilised from the private sector by official development finance interventions<sup>13</sup>. The DAC has recently published the preliminary results of its 2016 Survey<sup>14</sup>. The

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<sup>12</sup> Based on Asian Development Bank’s estimates <https://www.adb.org/sites/default/files/publication/227496/special-report-infrastructure.pdf> and OECD/DAC’s Creditor Reporting System.

<sup>13</sup> This work is carried out in consultation with multilateral and bilateral development finance institutions, as well as in close collaboration with the [OECD-led Research Collaborative on tracking private climate finance](#). It is also expected to contribute to the ongoing development of a broader measurement framework of total official support for sustainable development (TOSSD) and the DAC work stream on blended finance.

results showed that, in 2012-15, USD 81.1 billion were mobilised from the private sector by official development finance interventions in form of guarantees, syndicated loans, shares in Collective Investment Vehicles, credit lines and DICs. Of this amount 33% was in infrastructure mainly in the energy sector through guarantees and syndicated loans. To complement DAC work, ENV also presented work to estimate mobilisation by public interventions including those beyond development finance (e.g. policies, capacity building) in South Africa<sup>15</sup>

- The **International Finance Corporation (IFC)/World Bank** intervened as a member of the **MDB Task Force on Measuring Private Investment Catalyzation and presented a joint methodology to measure mobilization from private sector and institutional investors** (including insurance companies, pension funds, and SWFs) for climate change and infrastructure development<sup>16</sup>. Based on 2016 commitment data – it was estimated that the total amount of private long-term co-financing mobilized by the MDBs was US\$163.6 billion. The proportion of total long-term co-financing for infrastructure (including power, water, transportation, telecoms, IT and social infrastructure (such as schools and hospitals) in all countries of operation was US\$68.7 billion.

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<sup>14</sup> See more results at: <http://www.oecd.org/dac/stats/mobilisation.htm>.

<sup>15</sup> Source: McNicoll et al. (forthcoming), “Estimating publicly-mobilised private finance for climate action: A South African Case Study”, OECD Environment Working Papers, OECD Publishing, Paris.

<sup>16</sup> In January 2016, the Heads of a group of MDBs agreed to convene a Task Force to develop a joint framework and methodology to measure private investment catalyzed by the MDBs. The first joint report of the Taskforce on total direct and indirect mobilization by the MDBs in 2016, was published in April 2017 See Mobilization of Private Finance by Multilateral Development Banks: 2016 Joint Report, April 2017.

## ANNEX 1 – WORKSHOP AGENDA

**G20/OECD Task Force on Institutional Investors and Long-term Financing- 14th Session**  
**Workshop on Data Collection for Long-term Investment**  
**Wednesday 10 May 2017, OECD Conference Centre, Paris, France**

<b>9.30 -9.35</b>	<p><b>Introduction:</b> Chaired by Damien Dunn, Manager, G20 Policy Division, Australian Treasury Department &amp; Chair of the G20/OECD Task Force on Institutional Investors and Long-term Finance</p> <p>André Laboul, Special Financial Advisor to the OECD G20 Sherpa and Senior Counsellor to the OECD Directorate for Financial and Enterprise Affairs (DAF)</p> <p>Flore-Anne Messy, Head of the Financial Affairs Division, OECD DAF</p>
<b>9.35 – 10.00</b>	<p><b>SESSION I: New Initiatives on Data Collection for Long Term Investment Financing</b></p> <ul style="list-style-type: none"> <li>• Peter van Der Ven, Head of National Accounts Division, OECD Statistics Directorate</li> <li>• Giuseppe Grande, Senior Economist, Bank of Italy</li> <li>• OECD Secretariat: Raffaele Della Croce, Lead Manager, Long-term Investment Project, OECD DAF</li> <li>• Discussion with participants</li> </ul>
<b>10.00-11.00</b>	<p><b>SESSION II: Measuring private sector investment and mapping financing channels for infrastructure</b></p> <ul style="list-style-type: none"> <li>• Dejan Makovsek, Economist, ITF / Fernando Mistura, Policy Analyst, Investment Division, OECD DAF</li> <li>• OECD Secretariat: Raffaele Della Croce, Lead Manager, Long-term Investment Project, OECD DAF</li> <li>• Mihir Sharma, senior Fellow, Observatory Research Foundation (ORF), India</li> <li>• Discussion with participants</li> </ul>
<b>11.00-11.15</b>	<b>Coffee Break</b>
<b>11.15-12.15</b>	<p><b>SESSION III: Infrastructure as an Asset Class</b></p> <ul style="list-style-type: none"> <li>• OECD Secretariat: Joel Paula, Policy Analyst, Long-term Investment Project OECD DAF</li> <li>• Guido Bichisao, Director EIB / Brer Adams, Director Global Infrastructure Hub</li> <li>• Andrew Davison, Senior Vice President, Moody's</li> <li>• Elina Rolfe, Head of Reporting and Assessment, Principles for Responsible Investment (PRI)</li> <li>• Discussion with participants</li> </ul>
<b>12.15-13.00</b>	<p><b>SESSION IV: Instruments to Attract Private sector Financing and Measuring Mobilization</b></p> <ul style="list-style-type: none"> <li>• Kaori Myamoto, Senior Policy Analyst, Statistics &amp; Development Finance, OECD Development Co-operation Directorate (DCD)</li> <li>• Alexandros Ragoussis, Economist, Thought Leadership, IFC - M DB Task Force</li> <li>• Lauren McNicoll, Policy Analyst, Climate, Biodiversity &amp; Water Division, OECD Environment Directorate &amp; Tomas Hos, Research Officer Statistics &amp; Development Finance, OECD DCD</li> <li>• Discussion with participants</li> </ul>
<b>12.45-13.00</b>	<b>Conclusions, Next Steps</b>

## ANNEX 2: REFERENCES MATERIAL DISCUSSED AT THE WORKSHOP

1. Please find below the links to Moody's most recent research on (1) the credit performance of project finance bank loans, and (2) the credit performance of Moody's-rated infrastructure debt securities, that were referred to in the Moody's presentation.

- [Default and Recovery Rates for Project Finance Bank Loans, 1983-2015](#) (March 2017)  
This study reports on the credit performance of approximately \$1.8 trillion of project finance bank loans. For the first time, this report includes default and recovery rates based on World Bank Group country classifications
- [Infrastructure Default and Recovery Rates, 1983-2015](#) (July 2016).  
This study reports on the credit performance of \$2.7 trillion of Moody's-rated infrastructure securities, comprised of \$1.9 trillion of debt and preferred stock issued by corporate infrastructure and project finance entities and \$0.8 trillion of infrastructure debt issued by US municipal obligors
- [Addendum: Infrastructure Default and Recovery Rates, 1983-2015](#) (April 2017)  
This report focuses on the credit performance of a subset of 1,033 Moody's-rated corporate infrastructure securities (excluding project finance entities and excluding municipal entities) contained within the July 2016 study's larger data set.

2. IFC note on [Mobilizing Institutional Investments into Emerging Market Infrastructure](#).

3. S&P Global Ratings recently launched its Green Evaluation. Below are links to the media release plus the three key publications that they have released:

- [S&P Global Ratings Announces New Green Evaluation Service](#)
- [Green Evaluation Analytical Approach](#)
- [Beyond Green Bonds: Sustainable Finance Comes Of Age](#)
- [We Won't Solve for Green Finance Unless We Solve For Infrastructure](#)