Webinar Joint Impact Model (JIM)

27 November, Den Haag
Agenda

1  Intro

2  About the Model

3  Key Features and Methodology

4  Practical Implementation

5  Next Steps

6  Q+A
Joint Impact Model (JIM) – About the Model

27 November, London
Why model indirect impacts?

- Direct impact is only a fraction of the total impact of a project
- Observing indirect impact is challenging and often not practically feasible
- Consistent and efficient approach to assessing indirect impact
Why join together?

- Increased demand for transparency and harmonisation
- Growing number of users, all with different approaches
- Enables opportunities for collaboration and shared learning
- Creates opportunity for other users to assess their indirect impact
Our approach to JIM

Group objective:
- Develop a single model by harmonising methodology, model and input data.
- Aligned approach for our institutions to calculate and report indirect impact.
- Make it publicly available for a wider group of users.
- Continue to work across institutions and experts to further refine and align the model especially for Jobs and GHG emissions, where there is ongoing work.
Key features of model

An Input-Output (I-O) model

Models financial flows of project(s) through an economy

These financial flows can be translated into other appropriate impacts

Currently includes:

- Value added
- Employment
- GHG emissions

Final adjustments
Joint Impact Model (JIM) – Key Features and Methodology

27 November, Den Haag
1 Key features
2 Interface
3 Methodology
What is the JIM?

1. Reveals indirect impacts
2. Harmonised approach
3. Transparent
4. Combines best-practices
5. Open access
What insights does the JIM provide?

VALUE ADDED
- Salaries
- Taxes
- Profits

EMPLOYMENT
- Jobs for women
- Jobs for youth

GHG EMISSIONS
- CO₂ emissions
- Non-CO₂ emissions
What is the scope of these insights?

- Suppliers’ suppliers
- Suppliers
- Investee
- Customers

**SUPPLY CHAIN IMPACT**
- Power & finance only

**DIRECT IMPACT**
- Re-spending salaries

**INDUCED IMPACT**
- Re-spending salaries

Impact for which observed data is often available
Additional impacts that are modelled
1 Key features

2 Interface

3 Methodology
How does the JIM work?

1. Input template
2. Model calculations
3. Results visualisations
Input template example

A full list of inputs and definitions will be published on www.jointimpactmodel.com
Results visualisation example

Job impact

- Year: 2016, 2017, 2018
- Sector: Agriculture, forestry and fishing, Education
- Country: Argentina, India
- Sub-region: Latin America and the Caribbean, South-eastern Asia
- Income classification: High income, Low income
- Client type: All, Corporate

Bar chart showing job impact for different sectors and years.

- All sectors: 89,040,979
  - Wholesale and retail trade, repair of motor vehicles: 21,264,451
  - Agriculture, forestry and fishing: 15,384,665
  - Utilities: 10,696,028
  - Accommodation: 9,500,164
  - Manufacturing: 8,744,190
  - Mining and quarrying: 3,091,973
  - Financial services: 1,693,611
  - Transport, storage and communication: 8,820,432
  - Public administration and defence: 6,775,192
  - Construction: 1,405,497
1  Key features

2  Interface

3  Methodology
How does the JIM quantify results?

CONSUMPTION & EXPORTS of company outputs lead to TRANSFERS of money between sectors leading to

- VALUE ADDED
- EMPLOYMENT
- GHG EMISSIONS
How does the JIM quantify results?

CONSUMPTION & EXPORTS of company outputs lead to TRANSFERS of money between sectors leading to VALUE ADDED, EMPLOYMENT, GHG EMISSIONS.
How does the JIM quantify results?

CONSUMPTION & EXPORTS of company outputs lead to TRANSFERS of money between sectors leading to VALUE ADDED, EMPLOYMENT, and GHG EMISSIONS.
What data sources does the JIM use?

Social Accounting Matrices and GHG data for 121 countries and 65 sectors worldwide;

Employment data for 189 countries and 14 sectors worldwide;

Various indicators including GDP growth, private sector capital formation, electricity consumption for 217 countries worldwide;
Why an Input-Output methodology?

- More complete impact insights
- Applicable to full portfolio
- Low data burden
- Explanatory value
What are key limitations?

- Methodological constraints
- Data source limitations
- Neglecting unique features of investments
- Dependency on revenue data
- Local impact only
The JIM

1. Organisations have a need for quantifying indirect impact

2. We developed a model that enables organisations to obtain these insights

3. It is a joint process for continuous improvement: the more parties contribute, the better the model becomes
Joint Impact Model (JIM) - Practical application
From individual institutions approaches... 

<table>
<thead>
<tr>
<th>OBJECTIVES</th>
<th>PROPARCO</th>
<th>CDC</th>
<th>FMO</th>
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<tbody>
<tr>
<td>• Estimate job and value added by country and by RNE technology based on PROPARCO’s portfolio</td>
<td>• Estimate job supported by CDC’s portfolio to better understand employment impact</td>
<td>• Estimate jobs supported by FMO’s projects</td>
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<td>• Propose an assessment methodology that could be easily replicated</td>
<td>• Provide a methodology that could be easily applied to entire portfolio</td>
<td>• Provide a methodology that could be easily applied all investments</td>
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<tr>
<td>• Project level</td>
<td>• Portfolio level</td>
<td>• New commitments level</td>
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<tr>
<td>• Ex ante assessment during due diligence</td>
<td>• Monitoring</td>
<td>• Ex ante assessment of new investment</td>
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<td>• Investment decision</td>
<td>• Strategy learning &amp; decision making</td>
<td>• Reporting</td>
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Examples of Power enabling impact

**UKRAINE**

110 MW Wind project
Total investment: 175 MEUR with a 25 MEUR Proparco loan
25 years of operation
Total Construction expenditures: 147 MEUR (35% locally procured)
Total Operation expenditures: 28.7 MEUR

**TOTAL: 618 jobs**
- Operating impacts (20)
- Construction impacts (116)
- Second order growth impacts (481)

**Value Added 8 MEUR**
- Agriculture (0.9)
- Manufacturing (3.4)
- Other industries (1.5)
- Services (2.7)

**KENYA**

50.4 MW Wind project
Total investment: 127.2 MEUR with a 23.8 MEUR Proparco loan
20 years of operation
Total Construction expenditures: 64.4 MEUR (15% locally procured)
Total Operation expenditures: 62.8 MEUR

**TOTAL: 15,106 jobs**
- Operating impacts (2,543)
- Construction impacts (135)
- Second order growth impacts (12,429)

**Value Added 45 MEUR**
- Agriculture (3.6)
- Manufacturing (7.8)
- Other industries (11.1)
- Services (22.8)
...to The Joint Impact Model

**Scope**
- All sectors and different pathways to output
- Backward effects and developing forward effects

**Applicability**
1. Portfolio monitoring level
2. Confidence levels provided depending on:
   - Granularity of input data (from must have to nice to have)
   - Underlying multipliers (from modelled to case study estimates)

**Future Use**
1. Joint reporting (careful when confidence levels are too different)
2. Joint learning & develop collective understanding of our impact
3. Improve strategic decision

Facilitate reporting for common client, Increase comparability of activities, Improve collectively.
Please subscribe [here](http://www.jointimpactmodel.com) to stay in touch!