Chapter 6: Integrated reporting - metrics and data
## Overview of the book

**Part I: What is sustainability and why does it matter?**

1. Sustainability and the transition challenge

**Part II: Sustainability’s challenges to corporates**

2. Externalities - internalisation
3. Governance and behaviour
4. Coalitions for sustainable finance
5. Strategy and intangibles – changing business models
6. Integrated reporting - metrics and data

**Part III: Financing sustainability**

7. Investing for long-term value creation
8. Equity – investing with an ownership stake
9. Bonds – investing without voting power
10. Banks – new forms of lending
11. Insurance – managing long-term risk

**Part IV: Epilogue**

12. Transition management and integrated thinking
Learning objectives – chapter 6

- describe the benefits and limitations of traditional reporting
- explain the emergence and relevance of integrated reporting
- explain the obstacles integrated reporting faces
- illustrate the characteristics of an integrated report
Why does reporting matter?
Reporting

Challenges Legitimacy?

Tangible assets

Intangible assets

Double entry book keeping
Joint stock companies
Growth of capital markets
Accounting standards
Healthcare companies
Technology companies
Emergence of integrated reporting

- Guiding principles
- Elements of an integrated report
- IIRC, GRI, SASB
- 6 capitals
7 guiding principles of <IR>:

- Strategic focus & future orientation
- Connectivity of information
- Stakeholder relationships
- Materiality
- Conciseness
- Reliability & completeness
- Consistency & comparability
8 elements of an integrated report

- Organisational overview & external environment
- Governance
- Business model
- Risks & opportunities
- Strategy & resource allocation
- Performance
- Outlook
- Basis of presentation
Example of <IR> in practice: Novozymes

Novozymes produces a wide range of industrial enzymes and microorganisms. Together with our partners, we turn to biology to unlock business opportunities across industries. We create microorganisms that help farmers achieve a better harvest and support sustainable agriculture. And we deliver biological innovation to producers of ethanol, bread, detergents, textiles and many other products. In brief, our business model is to develop biotech solutions to the world’s pressing problems, profit from doing so, and then reinvest in finding more biological answers.
Example of IR in practice: DSM

How DSM creates value for its stakeholders

Capital inputs

- People
  - Employees
  - Training & development
  - Stakeholder engagement & Public-Private Partnerships
  - Philanthropy & sponsoring

- Planet
  - Raw materials (including renewables)
  - Energy (including renewables)
  - Water

- Profit
  - Shareholder equity
  - Borrowings
  - Partnerships & open innovation
  - Purchased goods & services
  - Manufacturing asset base

DSM's business

- Mission
- Business groups
- Support functions

Value outcomes

- People
  - Safety & health
  - Brighter Living Solutions
  - Engaged workforce
  - Skills & employability
  - Employee benefits
  - Improved nutrition

- Planet
  - Reduced environmental footprint
  - Brighter Living Solutions
  - Enabling transition to (bio-) renewable & circular economy
  - Safer ingredients & materials

- Profit
  - Financial performance (Adjusted EBITDA & ROCE growth)
  - Dividend
  - Contribution to business success for customers & suppliers
  - Contribution to civil society via tax
  - Patents & royalties
## Imagining a 6 capitals balance sheet (1)

### Traditional balance sheet

<table>
<thead>
<tr>
<th>Assets</th>
<th>Liabilities &amp; Equity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash</td>
<td>Interest-bearing debt</td>
</tr>
<tr>
<td>Inventory</td>
<td>Environmental liabilities</td>
</tr>
<tr>
<td>Property, plant &amp; equipment (PP&amp;E)</td>
<td>Equity</td>
</tr>
<tr>
<td><strong>Total assets</strong></td>
<td><strong>Total liabilities &amp; equity</strong></td>
</tr>
<tr>
<td>5000</td>
<td>5000</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Assets</th>
<th>Liabilities &amp; Equity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net Present Value of projects</td>
<td>Interest-bearing debt</td>
</tr>
<tr>
<td></td>
<td>Environmental liabilities</td>
</tr>
<tr>
<td></td>
<td>Equity</td>
</tr>
<tr>
<td><strong>Total assets</strong></td>
<td><strong>Total liabilities &amp; equity</strong></td>
</tr>
<tr>
<td>12000</td>
<td>12000</td>
</tr>
</tbody>
</table>
## Imagining a 6 capitals balance sheet (2)

### Six capitals balance sheet

<table>
<thead>
<tr>
<th>Assets</th>
<th>Liabilities &amp; Equity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial capital (cash+inventory)</td>
<td>Negative financial capital (debt)</td>
</tr>
<tr>
<td>1000</td>
<td>1500</td>
</tr>
<tr>
<td>Manufactured capital (PP&amp;E at replacement cost)</td>
<td>Negative natural capital (liabilities)</td>
</tr>
<tr>
<td>7500</td>
<td>4500</td>
</tr>
<tr>
<td>Social &amp; relationship capital</td>
<td>Equity</td>
</tr>
<tr>
<td>1500</td>
<td>7500</td>
</tr>
<tr>
<td>Human capital</td>
<td></td>
</tr>
<tr>
<td>500</td>
<td></td>
</tr>
<tr>
<td>Intellectual capital</td>
<td></td>
</tr>
<tr>
<td>3000</td>
<td></td>
</tr>
<tr>
<td><strong>Total assets</strong></td>
<td><strong>Total liabilities &amp; equity</strong></td>
</tr>
<tr>
<td><strong>13500</strong></td>
<td><strong>13500</strong></td>
</tr>
</tbody>
</table>

### Reminder: Traditional balance sheet

<table>
<thead>
<tr>
<th>Assets</th>
<th>Liabilities &amp; Equity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash</td>
<td>Interest-bearing debt</td>
</tr>
<tr>
<td>800</td>
<td>1500</td>
</tr>
<tr>
<td>Inventory</td>
<td>Environmental liabilities</td>
</tr>
<tr>
<td>200</td>
<td>500</td>
</tr>
<tr>
<td>Property, plant &amp; equipment (PP&amp;E)</td>
<td>Equity</td>
</tr>
<tr>
<td>4000</td>
<td>3000</td>
</tr>
<tr>
<td><strong>Total assets</strong></td>
<td><strong>Total liabilities &amp; equity</strong></td>
</tr>
<tr>
<td><strong>5000</strong></td>
<td><strong>5000</strong></td>
</tr>
</tbody>
</table>
<IR>: success or failure?

Problems:
- Limited adoption;
- Lack of certification;
- Too much focus on investors?

In favour:
- More meaning;
- More to come…
Examples of metrics

Environmental
GHG emissions: Scope 1, 2 & 3 vs emissions saved

Social
Employee attrition
Health & safety data

Governance
Voting rights, board structure, etc.
Examples of metrics in practice: Novozymes

Key sustainability performance

**CO₂ emission reduction**

30,000,000

In 2016, our customers avoided an estimated 69 million tons of CO₂ emissions by applying Novozymes' products. The savings achieved are equivalent to taking approximately 30 million cars off the road.

**Employee satisfaction**

“Satisfaction and motivation” score in annual employee survey

2016 realized

76

2016 target

≥ 75

**Water efficiency**

6%

**Energy efficiency**

10%

**Frequency of occupational accidents**

2.2
Examples of metrics in practice: DSM

**People**
- Workforce (at year-end 2016): 20,786
- Employee engagement favorable score (in %): 71
- Number of nationalities (at year-end 2016): 98
- Frequency Index of Recordable Injuries (per 100 DSM employees and contractor employees): 0.33

**Planet**
- Greenhouse-gas emissions, total DSM (in million tons CO₂eq): 1.5
- Energy use, total DSM (in petajoules): 22.6
- Water consumption, total DSM (in million m³): 22
- Brighter Living Solutions as % of net sales: 63

**Innovation sales as % of total sales:** 22
Examples of metrics in practice: Philips

Operational carbon footprint by scope (in kilotonnes CO₂-equivalent)

<table>
<thead>
<tr>
<th>Scope 1</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scope 2</td>
<td>114</td>
<td>109</td>
<td>106</td>
<td>121</td>
<td>58</td>
</tr>
<tr>
<td>Scope 3</td>
<td>654</td>
<td>594</td>
<td>612</td>
<td>658</td>
<td>751</td>
</tr>
<tr>
<td>Total (scope 1 to 3)</td>
<td>812</td>
<td>743</td>
<td>757</td>
<td>821</td>
<td>847</td>
</tr>
<tr>
<td>Emissions compensated by carbon offset projects</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>220</td>
</tr>
<tr>
<td>Net operational carbon emissions</td>
<td>812</td>
<td>743</td>
<td>757</td>
<td>821</td>
<td>627</td>
</tr>
</tbody>
</table>
## Sustainability data providers

<table>
<thead>
<tr>
<th></th>
<th>Raw data</th>
<th>Scores/ratings/advice</th>
</tr>
</thead>
<tbody>
<tr>
<td>Topic focused</td>
<td>Southpole (emissions data)</td>
<td>Equileap (gender equality ratings)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Glass Lewis, ISS (shareholder voting advice)</td>
</tr>
<tr>
<td>Comprehensive</td>
<td>Reprisk (tracking news on companies)</td>
<td>MSCI, Sustainalytics, RobecoSAM, oekom (all company scores and ratings)</td>
</tr>
</tbody>
</table>
Example of sustainability scoring

Overall score: 74

Environmental score: 76 (35% weight)
- Environmental policy (1.08% weight)
- Environmental management system (EMS) (2.15% weight)
- EMS certification (2.15% weight)
- etc.

Social score: 64 (40% weight)

Governance score: 86 (25% weight)
Value drivers: Novozymes

- Valuation
  - Sales growth
  - Margins
  - Capital

Innovation

Human capital
Value drivers: Mining

- Valuation
  - Sales growth
    - price
    - production volume
  - Margins
  - Capital
    - management of local stakeholders
    - environmental management
Conclusions

- Current reporting is incomplete
- <IR> is a step in the right direction
- Integrated thinking is even more important than integrated reporting