



Swedbank, Stockholm  
26<sup>th</sup> September 2013

## **The Increasing Importance of Ecosystem Services**

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Study Leader – TEEB  
CEO – GIST Advisory



Orage sur la forêt amazonienne près de Téfé, État d'Amazonas, Brésil (3°32' S - 64°53' O).

[www.yannarthusbertrand2.org](http://www.yannarthusbertrand2.org)



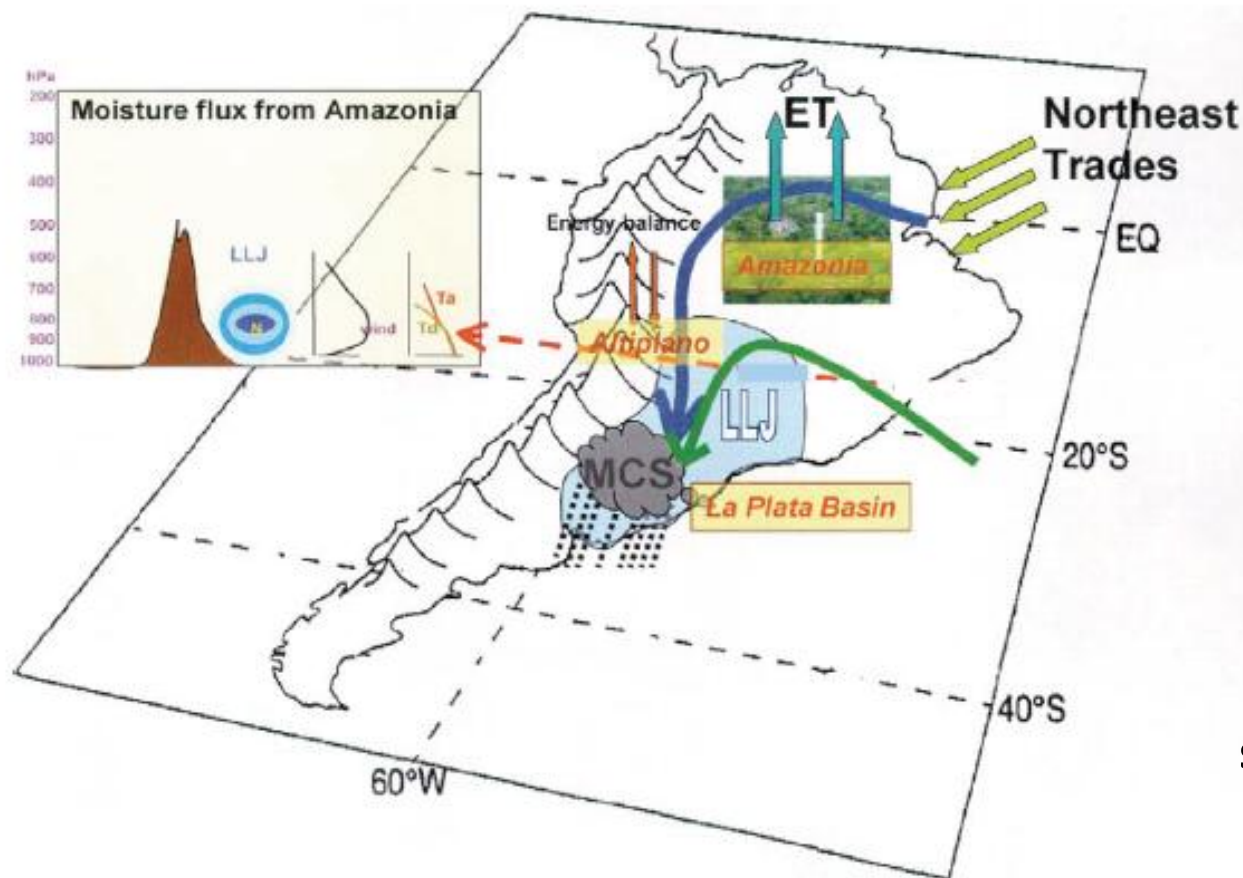
## About Rainforests and Rainfall....

- <http://www.vets.ucar.edu/vg/T341/index.shtml>





## Amazonia: Economic Invisibility of Freshwater



### Amazon Rainforest “Water Pump”

Evapo-transpiration  
puts 20 billion tonnes  
of water into the  
atmosphere daily,  
some of which falls  
as rain in the  
Rio Plata Basin...  
supporting a US\$ 240 billion  
agricultural economy



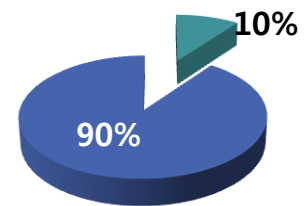
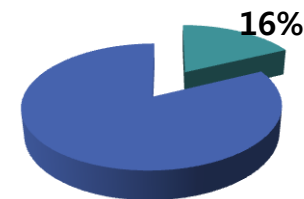
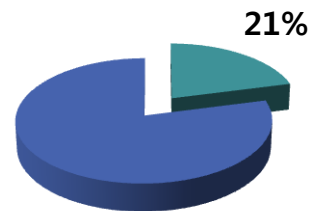
## For Poverty Reduction

Indonesia

India

Brazil

Ecosystem services as a % of classical GDP



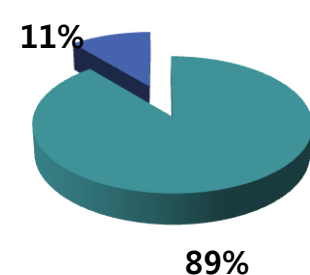
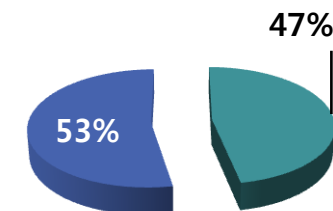
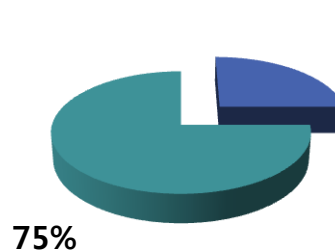
Ecosystem services dependency

99 million

352 million

20 million

Ecosystem services as a % of “GDP of the Poor”



 Ecosystem services



## For Business..

### Dependencies

- Climate stability
- Agri-productivity
- Materials
- Medicines
- Etc etc

### Impacts

- Emissions
- Land Use Change
- Freshwater
- Etc etc

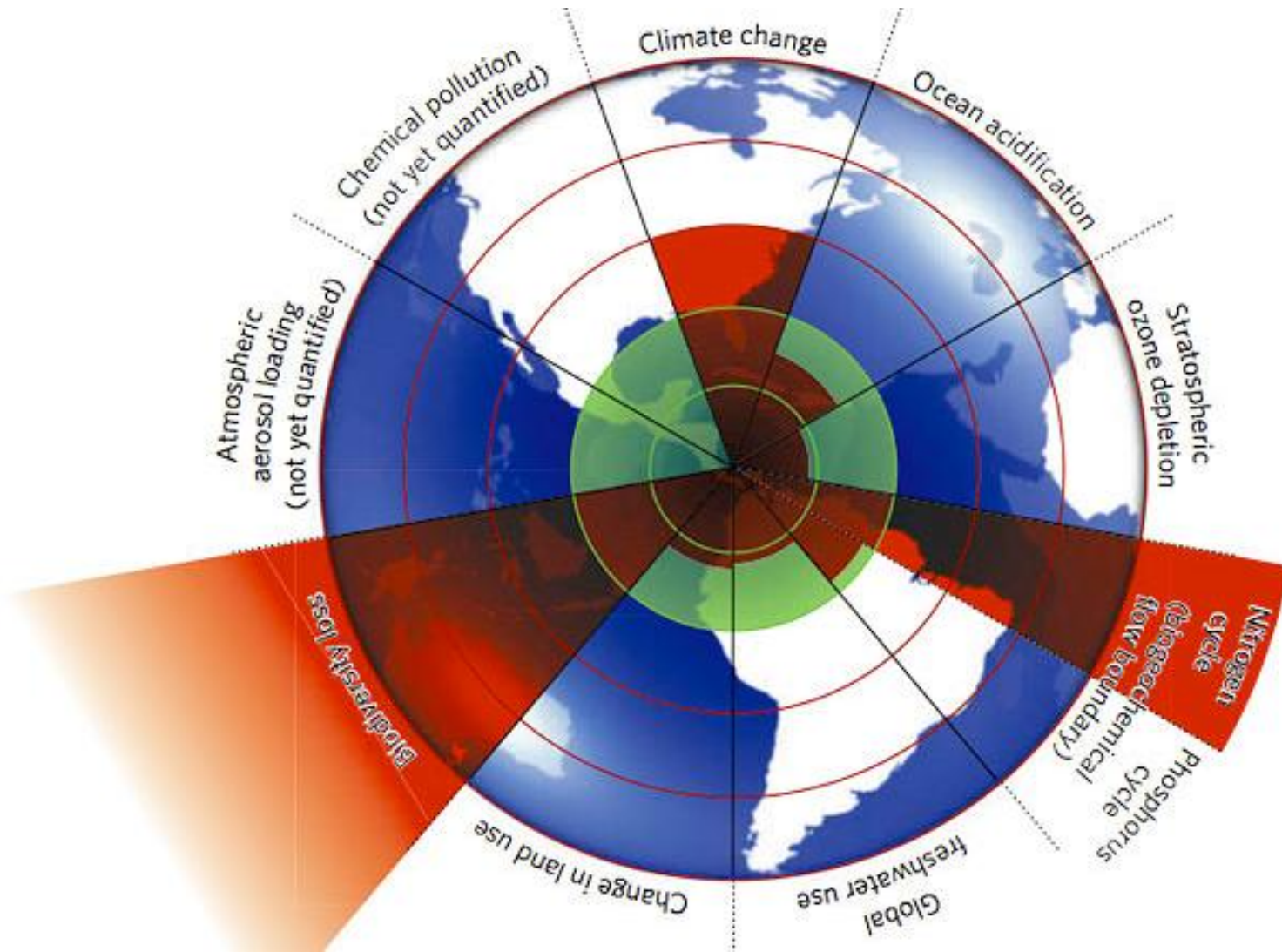
### Opportunities

- Green Carbon
- Bio-mimicry
- Cradle-to-cradle
- Etc etc

### Risks

- Business Disruption
- Resource Prices
- Social Licence to Operate...
- Etc etc

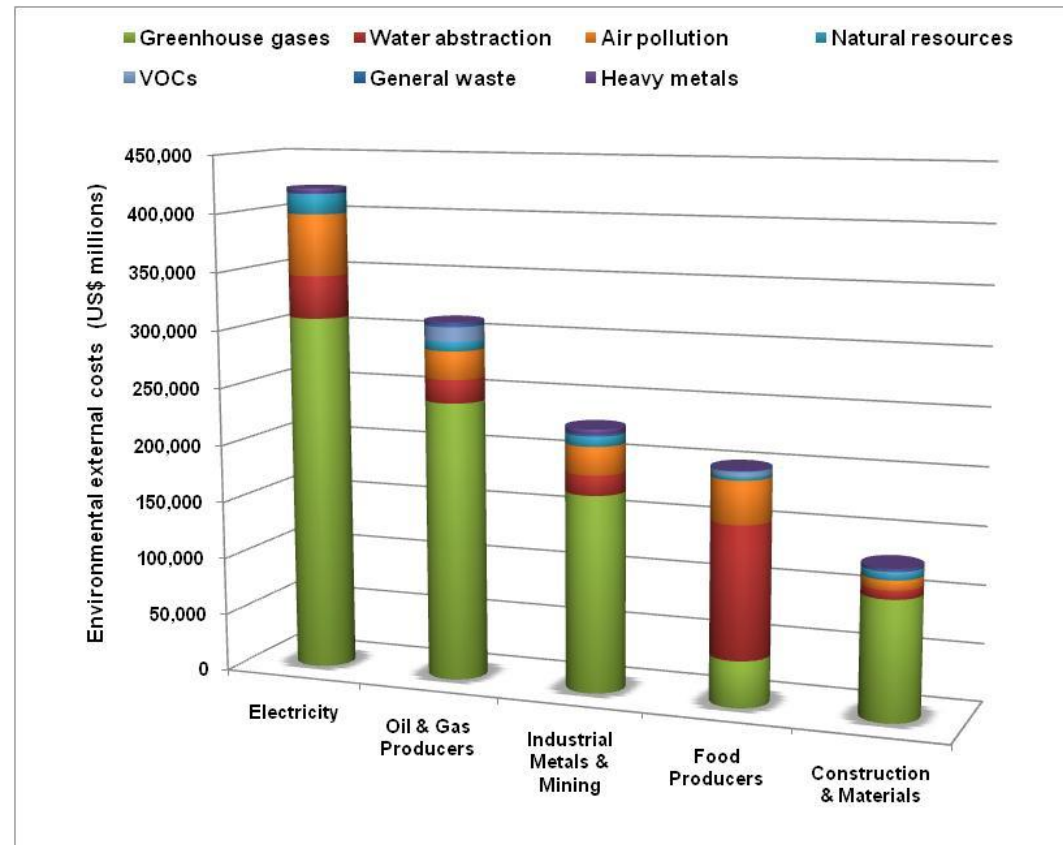
# The Risk Picture...





## The Risk Picture..

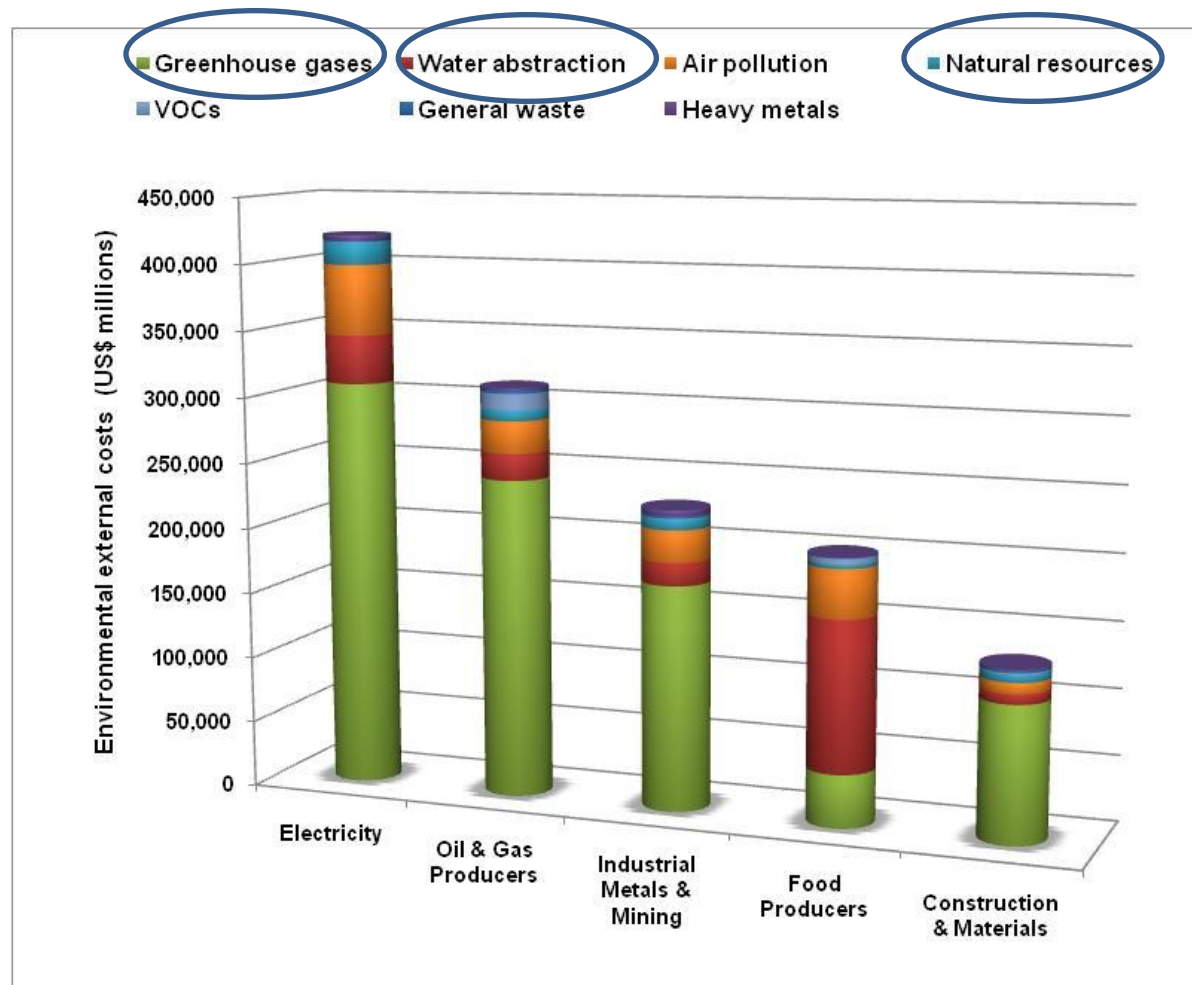
- Negative externalities of top 3,000 companies estimated at US\$2.15 trillion per annum



Source: Trucost for UNPRI, 2010.



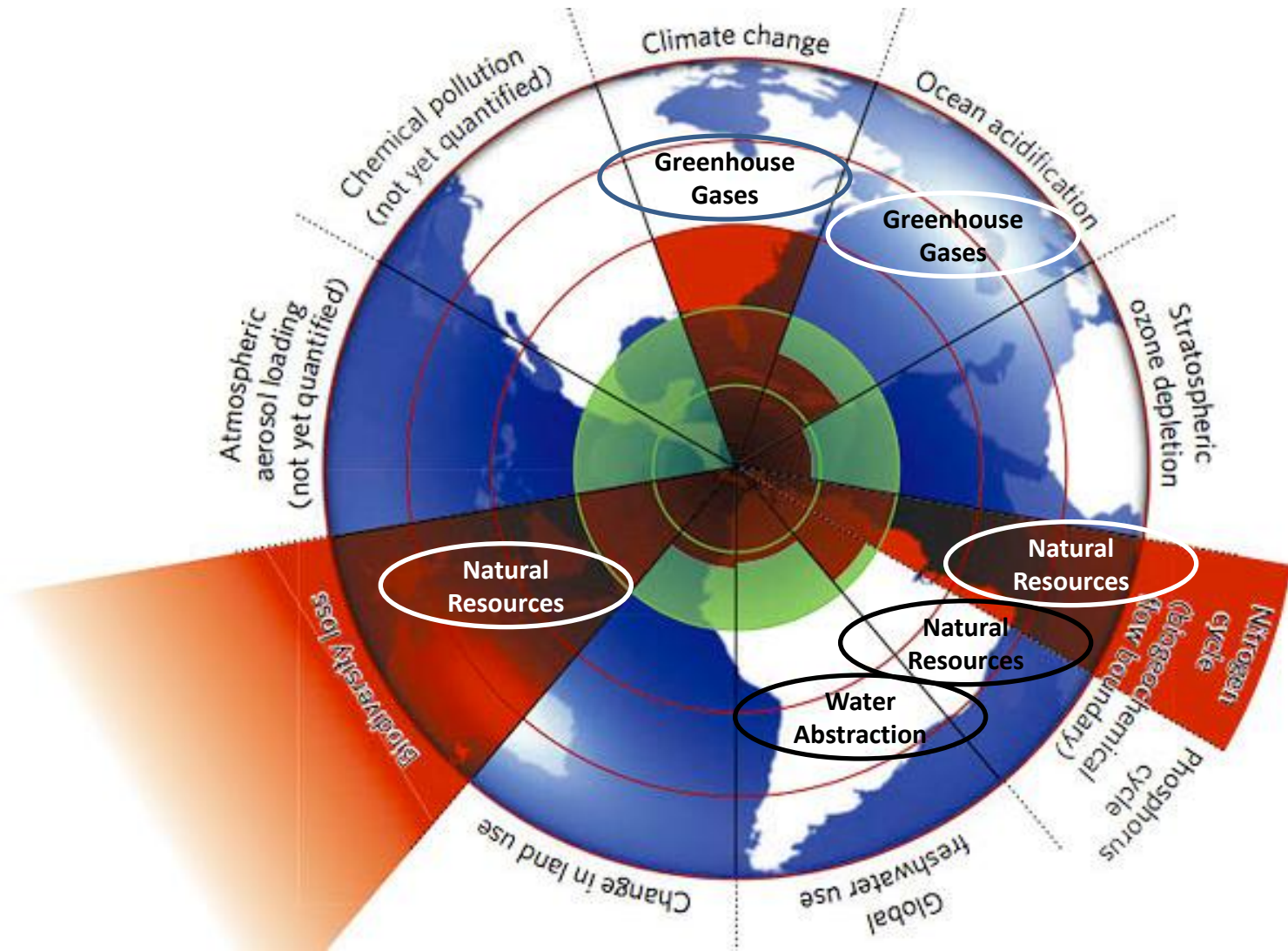
# Negative Corporate Externalities .....



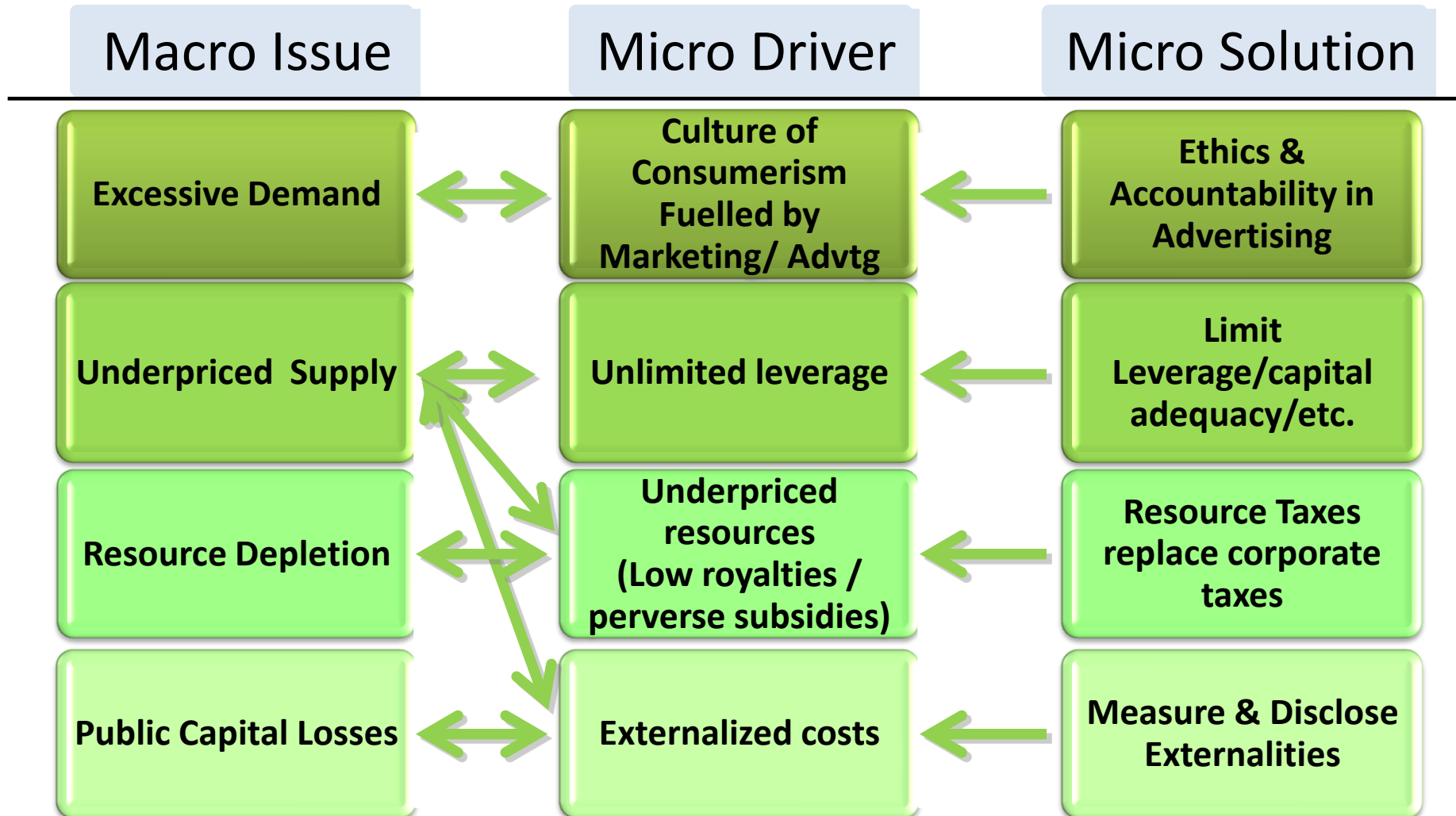
**Top 3,000  
Listed  
Companies**

Source: Trucost for  
UNPRI, 2010.

## ..... Pushing Planetary Boundaries



# What will drive change?



# Why Stakeholder Reporting?

**Business today depends on, and/or has impacts on, ALL dimensions of private & public wealth but..**

| EXAMPLES  | Physical Capital   | Human Capital   | Social Capital   | Natural Capital  |
|---|--|---|--|--|
| <b>Private Ownership</b>                            | <ul style="list-style-type: none"> <li>- Factories</li> <li>- Buildings</li> <li>- Securities</li> <li>- Cash</li> </ul> | <ul style="list-style-type: none"> <li>- Health</li> <li>- Education</li> <li>- Job Skills</li> </ul> |  | <ul style="list-style-type: none"> <li>- Gardens</li> <li>- Fields</li> <li>- Forests</li> </ul>           |
| <b>Community Ownership *</b><br><b>(club goods)</b> | <ul style="list-style-type: none"> <li>- Community Centres</li> <li>- Community Schools</li> </ul>                       | <ul style="list-style-type: none"> <li>- Traditional knowledge</li> </ul>                             | <ul style="list-style-type: none"> <li>- Community Norms and Customs</li> </ul>  | <ul style="list-style-type: none"> <li>- Community Forests</li> <li>- Grazing Commons</li> </ul>           |
| <b>Public Ownership *</b><br><b>(public goods)</b>  | <ul style="list-style-type: none"> <li>- Roads</li> <li>- Bridges</li> </ul>   | <ul style="list-style-type: none"> <li>- Public databases</li> <li>- Non-patent knowledge</li> </ul>  | <ul style="list-style-type: none"> <li>- Law &amp; Order</li> <li>- Taxation</li> <li>- Social Equity &amp; Inclusion</li> </ul> | <ul style="list-style-type: none"> <li>- High Seas fisheries</li> <li>- National Parks/ Forests</li> </ul> |

\* Creating community wealth and public wealth creates “**shared value**”



# Why Stakeholder Reporting?

**Business today generally measures & reports only shareholder wealth impacts: private physical capital**

| EXAMPLES                                | Physical Capital   | Human Capital   | Social Capital   | Natural Capital  |
|---|--|---|--|--|
| <b>Private Ownership</b>                | <ul style="list-style-type: none"> <li>- Factories</li> <li>- Buildings</li> <li>- Securities</li> <li>- Cash</li> </ul> | <ul style="list-style-type: none"> <li>- Health</li> <li>- Education</li> <li>- Job Skills</li> </ul> |  | <ul style="list-style-type: none"> <li>- Gardens</li> <li>- Fields</li> <li>- Forests</li> </ul>           |
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# Why Stakeholder Reporting?

**Business for a sustainable tomorrow - will measure & report on LL dimensions of its impacts \***

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# How Stake Holder Reporting? GIST 360<sup>o</sup>™ Assessment..

Financial  
Value  
Addition

Natural  
Capital  
Externalities

Human  
Capital  
Externalities

Social Capital  
Externalities

**Measuring “Value Addition” holistically, *including* all material Externalities**

# Disclosing Externalities : PUMA



|                        | Water use | GHGs      | Land use  | Air pollution | Waste     | TOTAL      |            |
|------------------------|-----------|-----------|-----------|---------------|-----------|------------|------------|
|                        | € million | € million | € million | € million     | € million | € million  | % of total |
|                        | 33%       | 32%       | 26%       | 7%            | 2%        | 100%       |            |
| <b>TOTAL</b>           | 47        | 47        | 37        | 11            | 3         | <b>145</b> | 100%       |
| <b>PUMA operations</b> | <1        | 7         | <1        | 1             | <1        | <b>8</b>   | 6%         |
| <b>Tier 1</b>          | 1         | 9         | <1        | 1             | 2         | <b>13</b>  | 9%         |
| <b>Tier 2</b>          | 4         | 7         | <1        | 2             | 1         | <b>14</b>  | 10%        |
| <b>Tier 3</b>          | 17        | 7         | <1        | 3             | <1        | <b>27</b>  | 19%        |
| <b>Tier 4</b>          | 25        | 17        | 37        | 4             | <1        | <b>83</b>  | 57%        |
|                        |           |           |           |               |           |            |            |
| <b>EMEA</b>            | 4         | 8         | 1         | 1             | <1        | <b>14</b>  | 10%        |
| <b>Americas</b>        | 2         | 10        | 20        | 3             | <1        | <b>35</b>  | 24%        |
| <b>Asia/Pacific</b>    | 41        | 29        | 16        | 7             | 3         | <b>96</b>  | 66%        |
|                        |           |           |           |               |           |            |            |
| <b>Footwear</b>        | 25        | 28        | 34        | 7             | 2         | <b>96</b>  | 66%        |
| <b>Apparel</b>         | 18        | 14        | 3         | 3             | 1         | <b>39</b>  | 27%        |
| <b>Accessories</b>     | 4         | 5         | <1        | 1             | <1        | <b>10</b>  | 7%         |



# Accountable Advertising : PUMA





# TEEB for Business Coalition:

*Measuring, Valuing, Disclosing Externalities*



WBCSD...  
GRI...  
CEF...  
CDP, WDP...

Quantifying  
Usage, Discovering  
Depend-encies &  
Impacts

TEEB for  
Business  
Coalition  
& Network

Standardizing &  
Valuing  
Impacts

IIRC, SASB, &  
Accountancy  
Regulators

Disclosing  
Impacts in  
"One Report"

Emissions /tCO<sub>2</sub>e  
Freshwater / CuM  
Forests LUC / Ha  
Pollution / ...  
Waste / ...

(Value Chain Impacts  
"Cradle to Gate")

Economic Costs of  
Emissions,  
Freshwater  
Use, Deforestation,  
Pollution, Waste ...

Framework for  
Integrated Reporting  
of *All* Externalities...  
incl Social & Human  
Capital..



# TEEB for Business Coalition:

*Measuring, Valuing, Disclosing Externalities*



## 'TEEB4BC' Report (15<sup>th</sup> April 2013) on Measuring & Valuing Externalities by *Business Sector & Region*.....



## NATURAL CAPITAL AT RISK: THE TOP 100 EXTERNALITIES OF BUSINESS

### RANKING OF THE 5 REGION-SECTORS WITH THE GREATEST OVERALL NATURAL CAPITAL IMPACT

| RANK | SECTOR                      | REGION           | NATURAL CAPITAL COST, \$BN | REVENUE, \$BN | IMPACT RATIO |
|------|-----------------------------|------------------|----------------------------|---------------|--------------|
| 1    | COAL POWER GENERATION       | EASTERN ASIA     | 452.8                      | 443.1         | 1.0          |
| 2    | CATTLE RANCHING AND FARMING | SOUTH AMERICA    | 353.8                      | 16.6          | 18.8         |
| 3    | COAL POWER GENERATION       | NORTHERN AMERICA | 316.8                      | 246.7         | 1.3          |
| 4    | WHEAT FARMING               | SOUTHERN ASIA    | 266.6                      | 31.8          | 8.4          |
| 5    | RICE FARMING                | SOUTHERN ASIA    | 235.6                      | 65.8          | 3.6          |



www.corp2020.com

 @Corp2020

# Corporation as “Community” : Natura Greater Economic Security for Women



<http://totallybeautyaddict.fr/mon-jolieapero-chez-natura-brasil/>  
Source: <http://www.managementexchange.com/story/innovation-in-well-being>



[www.corp2020.com](http://www.corp2020.com)

 @Corp2020



**Alessandro Carlucci**  
CEO, Natura

**Pavan Sukhdev**  
Author, "Corporacao 2020"

# What will define a “Corporation 2020”?

- Social Purpose: *Goals Aligned with Society*
- Capital Factory: *Positive Externalities*
- Institute: *Creating Human Capital*
- Community: *Creating Social Capital*

## In Summary : Reforms for “Corporation 2020” to become the DNA of Business

***Accountable Advertising*** : Making advertising responsible & accountable via norms & standards

***Limiting Leverage*** : Introducing rules & limits to govern financial leverage

***Resource Taxation*** : Replacing Corporation Tax (profits) with Taxes on Resource Use & Extraction

***Disclosing Externalities*** : Measuring & disclosing all major corporate externalities (+ve & -ve)

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**Thank You !**

**Pavan Sukhdev**  
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