



AN INTRODUCTION TO ENVIRONMENT AND SUSTAINABILITY TERMINOLOGY

IPLOCA CSR Workshop 22nd October 2019

Sue Sljivic



RSK Group – Key Facts

- Largest privately owned UK based environmental firm
- Growth from 1 person to over 3500 people over 30 years
- Our success is based on our client focused approach
- 100 offices across UK, Europe, Africa, Former Soviet Union and Middle East
- Leading provider of environmental and surveying services to the pipeline industry (routing, construction, operation and decommissioning)
- Specialist skills include:
 - Consents and permitting for pipeline projects and stakeholder consultation
 - Baseline surveys; ecological, socio economic, geotechnical and geophysical investigation
 - Agriculture and soils specialists (including remediation)
 - Contracting services in slope stabilisation and rope access
 - Earth observation technology and surveying

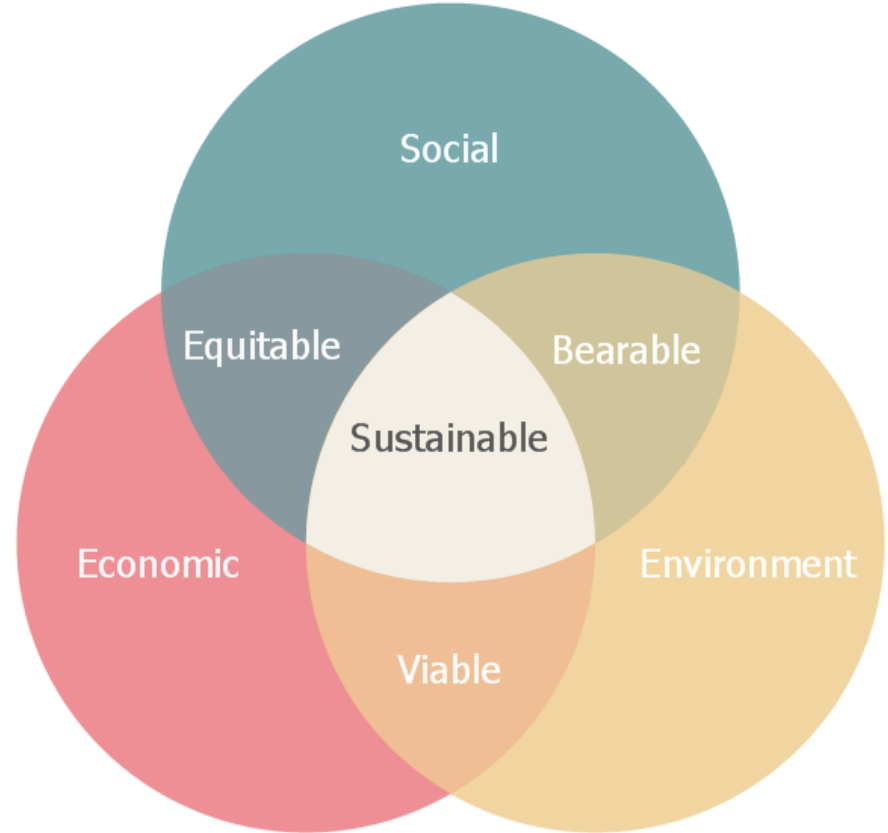
1. Introduction

Terminology

Sustainable Development

A desirable future state for societies in which living conditions and resource use meet human needs without undermining the sustainability of natural ecosystems and the environment

....So that future generations may also have their needs met



The Paris Agreement and the UN Sustainable Development Goals

- The SDGs offer a blueprint for a more sustainable world, launched by the UN and agreed to by 175 countries in 2015
- 17 goals broken down into 169 targets for 2030
- *The SDG's...were adopted as a universal call to action to end poverty, protect the planet and ensure that all people enjoy peace and prosperity by 2030"*

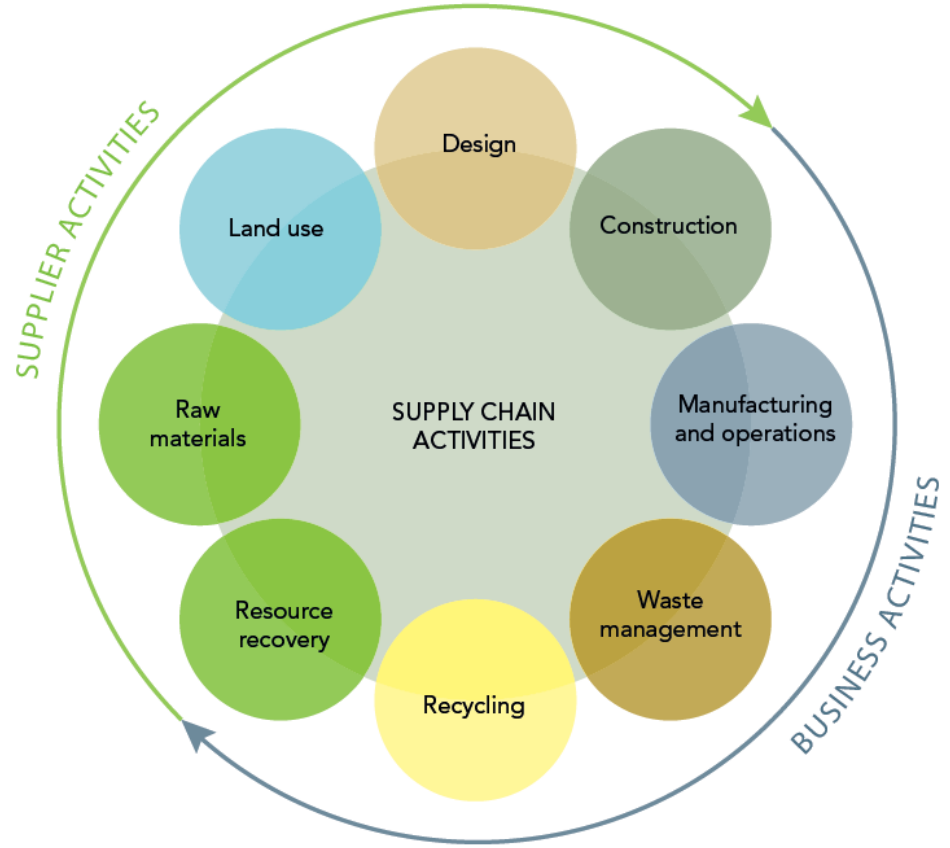
SUSTAINABLE DEVELOPMENT GOALS



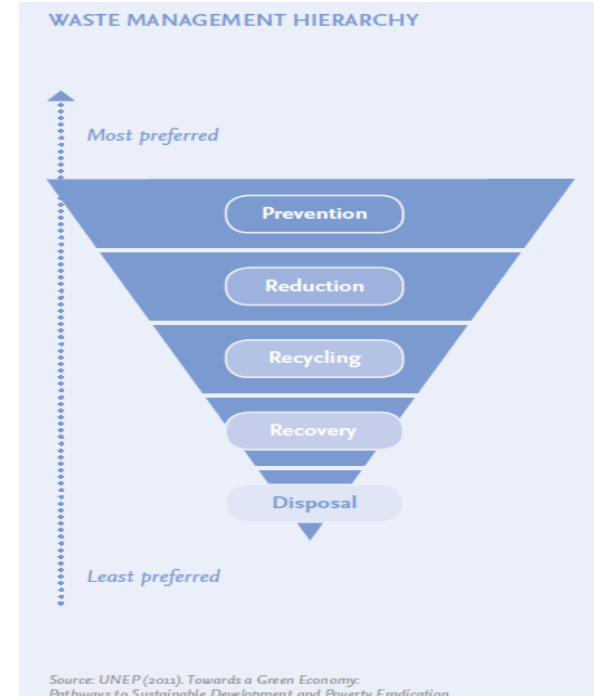
Circular Economy

Typical examples include:

- Product as a service
- Product life extension
- Closed loop take back
- Modularity
- Embedded intelligence
- Smart material choices
- Asset Sharing
- Feedback Loops
- Closed loop
- Waste as a resource



Waste Hierarchy



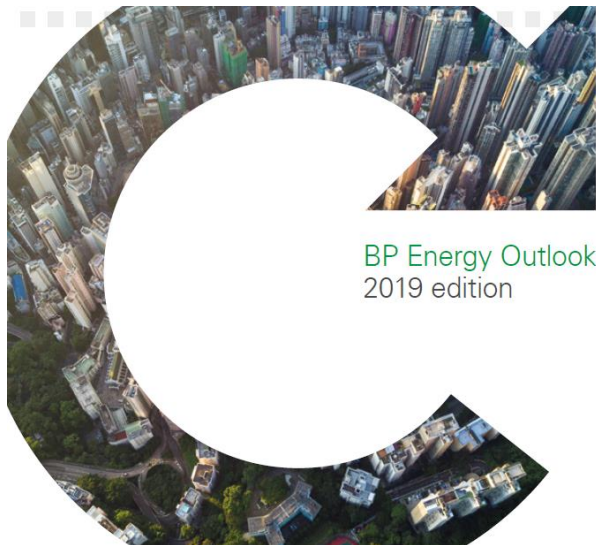
2. Transition

Global influences on the pipeline industry

Climate Change: Civil Society and Non Government Organisations (NGO's)



Scenarios for a Low Carbon Transition



BP Energy Outlook
2019 edition



WORLD
ENERGY
COUNCIL

World Energy
Scenarios | 2019



3. Pipeline Routing and Consents

The latest trends

Environmental Impact Assessment (EIA)

Trend is for increasingly comprehensive and detailed impact assessments.

EIA Environmental Impact Assessment

PEI Preliminary Environmental Impacts

ESIA + Social

ESSIA + Security

ESSHIA + Health

= Environmental, Social, Security and Health Impact Assessment

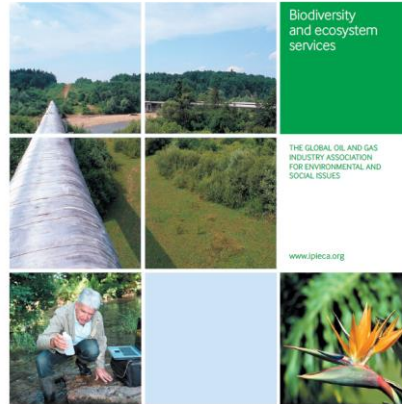
Ecosystem Services



IPIECA  International Petroleum Industry Environmental Conservation Association

Biodiversity and ecosystem services fundamentals

Guidance document for the oil and gas industry



Social and Economic Assessment

Stakeholder engagement to identify project affected people (PAP) and Project Affected Communities (PAC)

Work undertaken by Land Access and Resettlement experts and can take a considerable time to complete, particularly in areas where records are not complete, or informal rights to land exist.

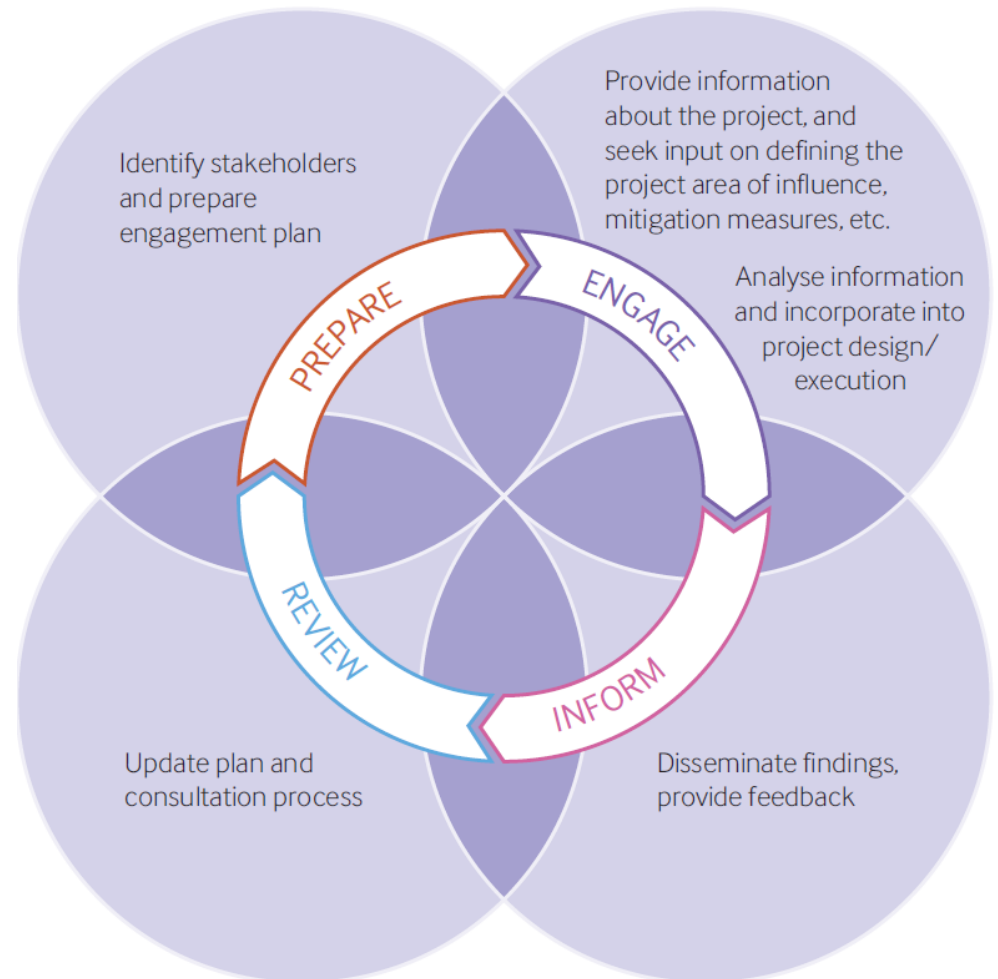
- Land Access Frameworks (LAF)
- Resettlement Action Plans (RAP)

It is important to ensure that compensation goes to the right people in the right form



Stakeholder Engagement Cycle

- Identify stakeholders and their dependencies early in the project design
- Build trusting relationships
- Communicate appropriately, clearly and effectively
- Tailor communications to their specific circumstances (influence and interest)
- Demonstrate through project design that the interests of stakeholders have been taken into account
- Do not shy away from the difficult conversations
- Be available and responsive
- Seek out vulnerable groups
- Agree commitments and mitigation measures that are meaningful and appropriate



Source IOGP 2014 Overview of Environment-Social-Health Risk Assessment and Impact Management Process

Environmental and Social Management and Monitoring Plans (ESMMP)

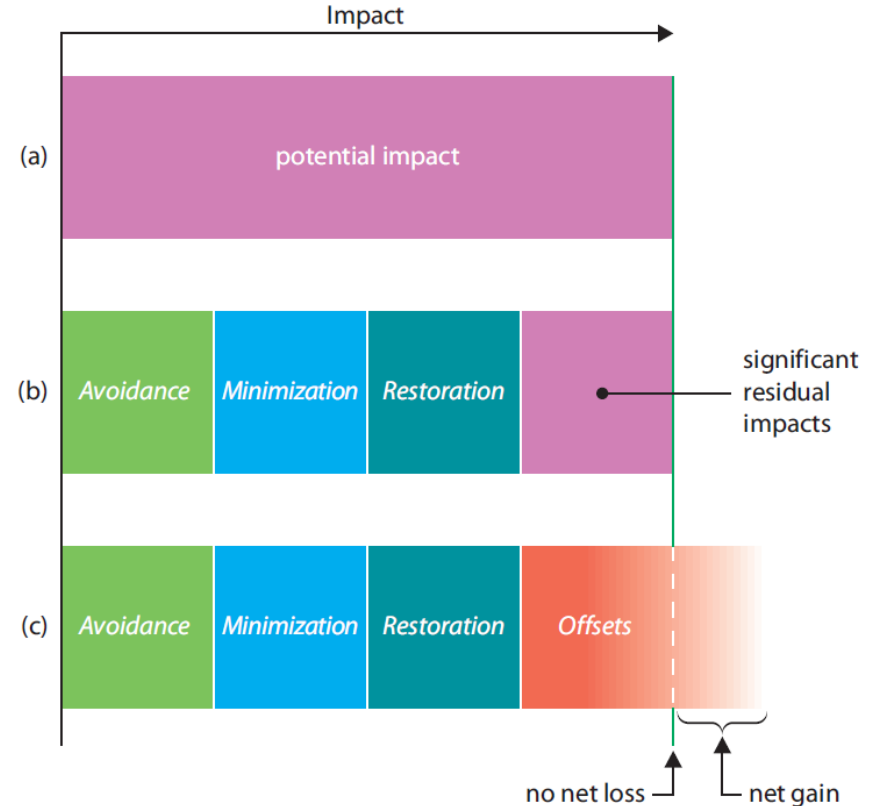
- Detailed plans showing how each commitment or permit condition will be implemented and monitored
- Identification of mitigations is iterative. Preferred solution is to engineer out impacts through design – but detailed design often follows the impact assessment which is based on preliminary design
- Outcome based commitments provide greater flexibility during operation and can be more cost effective than prescriptive commitments
- Better written when the contractor is on board, but may be required by regulators / lenders earlier
- Opportunity for contractors to develop their own strategies in support of ESMMP matching

Pipeline Routing Impact Assessment: Mitigation Hierarchy

Mitigation hierarchy aims to minimise the potential impacts and applies the principles of:

- Avoid
- Minimise; and
- Restore

Offset, is a last resort and is difficult to complete, as it requires long term management.

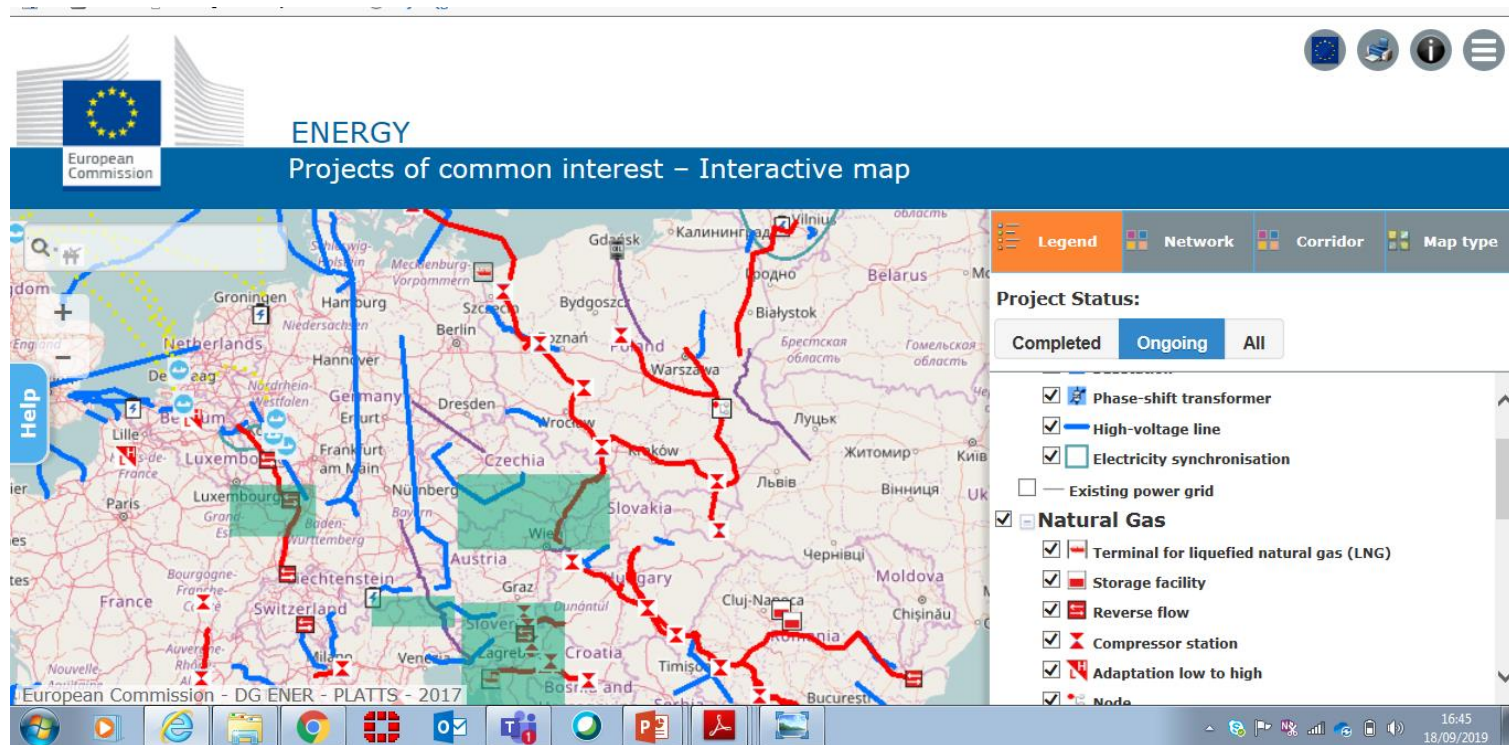


Source: A cross sector guide for implementing the mitigation hierarchy; Biodiversity Consultancy 2015

4. Transboundary Pipelines

Lender requirements

Pipelines of Common Interest (PCI)



Project Reporting Standards: Lender Requirements Environment and Social Governance (ESG)



5. Business Standards

Corporate Reporting

Corporate Reporting Standards



Many frameworks for reporting corporate environmental and social performance...



United Nations
Global Compact

6. In summary

In Summary

- The Oil and Gas industry is in a long term transition phase
- Innovation is going to become increasingly important to demonstrate efficiencies
- Businesses will continue to need demonstrate the highest standards in employment, stakeholder engagement and environmental management (sustainability).
- Pipeline projects particularly for fossil fuels will continue to attract opposition
- We are all responsible for advocacy in respect that pipelines are a safe and sustainable way to transport fuels.
- Pipelines construction projects, particularly in remote areas, have the potential to leave a long term lasting legacy which can be beneficial to local communities (in whatever form is best suited to their needs education, employment, wealth, soil health, energy, waste management).
- The costs of social and environmental mitigation should be identified early and managed properly throughout the whole project lifecycle

A composite image showing the Earth as a bright blue and white sphere rising over the dark, cratered horizon of the Moon. The scene is set against the black void of space. The text "Think Globally, Act Locally and Change Personally" is overlaid in white, centered horizontally and partially covering the Earth.

Think Globally, Act Locally and
Change Personally

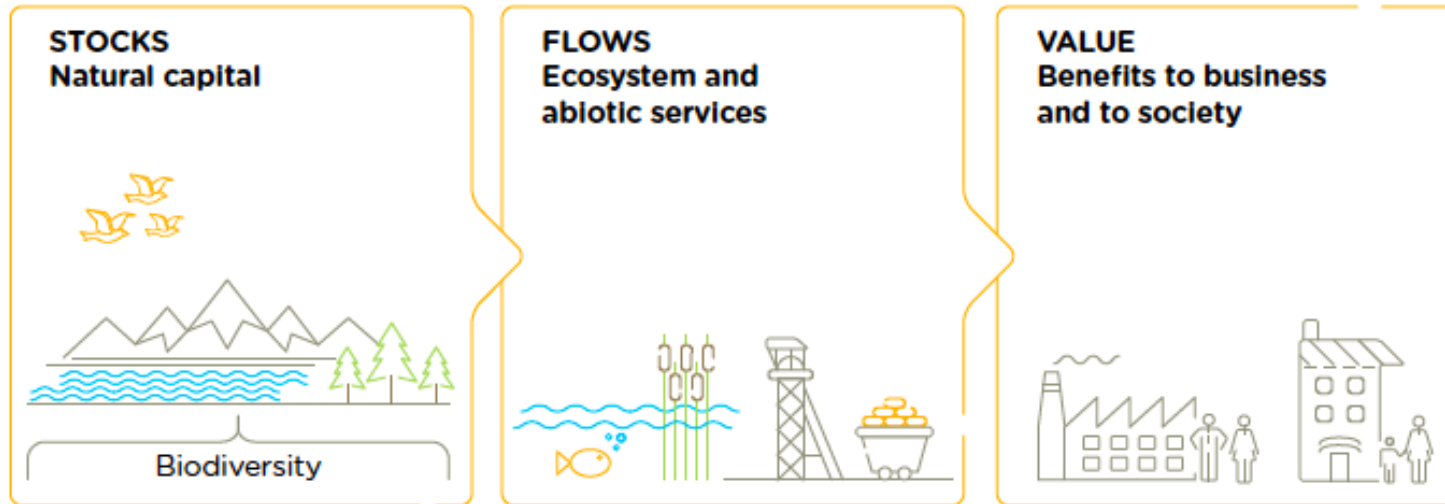
Questions and answers



SAFEGUARDING YOUR
BUSINESS ENVIRONMENT

Natural Capital

Natural Capital: *'The stock of renewable and non-renewable natural resources (e.g. plants, animals, air, water, soils, minerals) that combine to yield a flow of benefits (ecosystem services) to people'*



Source: Natural Capital Coalition: Natural Capital Protocol (2016)

Natural Capital: Business Risks and Opportunities

