

European Business & Nature Summit

GS6 — Boosting sustainability innovation through biodiversity

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7 & 8 November 2019

#BusinessNatureSummit



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READS - A new approach for the valuation of impacts and dependencies on natural capital

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7 & 8 November 2019



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Our Commitment

We are committed to mitigating the potential impacts on biodiversity and ecosystem services in all our projects and operations.

- We were the **1st Oil and Gas Company** to apply the “Biodiversity and Ecosystem Services (BES) Management Ladder”, from IPIECA.
- Since 2017 we are members of the Natural Capital Coalition and we are working to incorporate the **real value of environmental impacts and dependencies** into the economic analysis of projects and operations.



Value Proposition

- **READS** is an innovative methodology for the valuation of environmental impacts and dependencies on natural capital.
 - It combines pioneering scientific and technical resources for quantifying impacts and dependencies of Repsol's operations along its value chain.
 - It measures and values the financial and non-financial impacts of business activities simultaneously in **monetary terms** and **dimensionless impact units**.

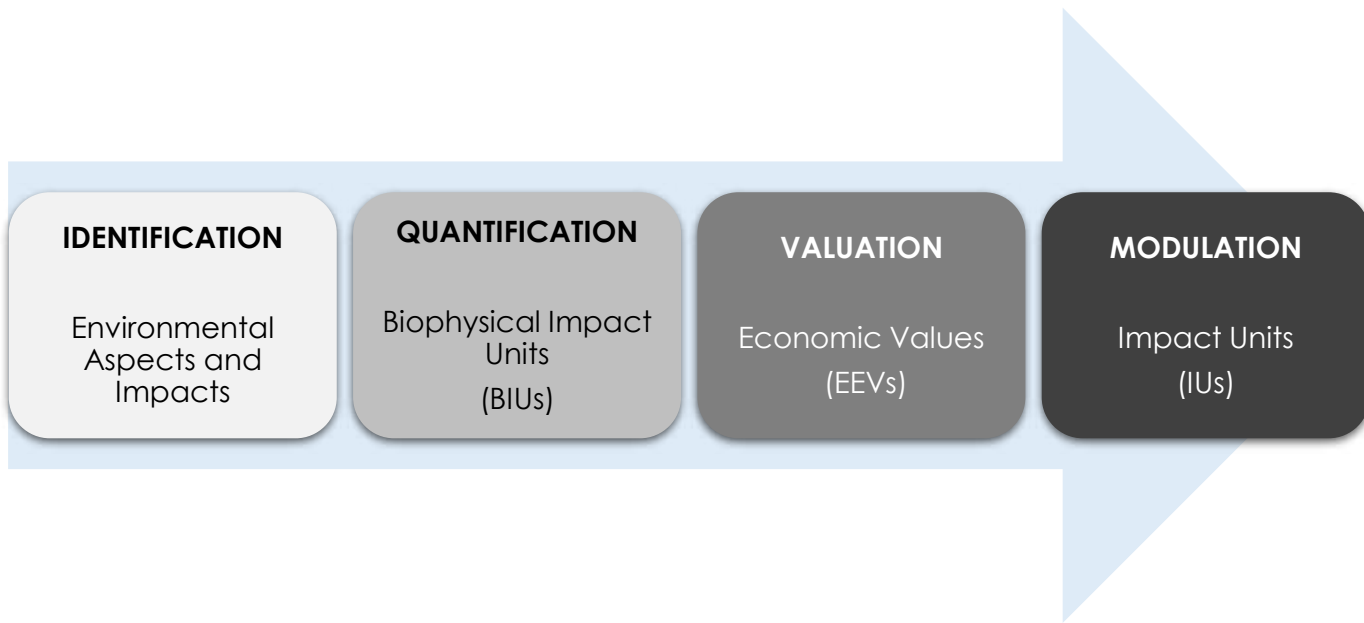


Objectives

- Create an innovative approach to **quantify** and **value** environmental impacts and dependencies in Repsol.
- Align this approach with the **Natural Capital Protocol** framework and **ISO 14008:2019**, on Monetary valuation of environmental impacts
- Manage environmental impacts and dependencies by considering their relevance in the **economic analysis** of projects.
- Develop a 'marketable' **digital solution** with focus in enabling top management decision making.



Impact Methodology



Impacts - Identification / Quantification

Identify

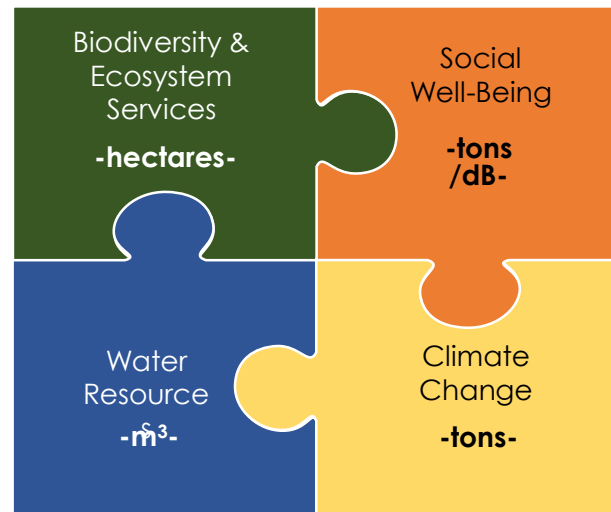
Aspects / Impacts

Quantify

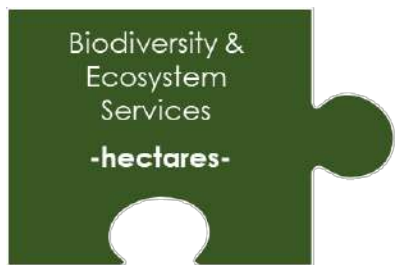
BIUs

The BIUs measure the magnitude of impacts (e.g. tons, m³, ha, dB), due to:

- Air emissions
- Water use
- Wastewater discharges
- Waste management
- Land occupation
- Noise
- Light,...



Impacts - Valuation / Modulation



READS uses CICES

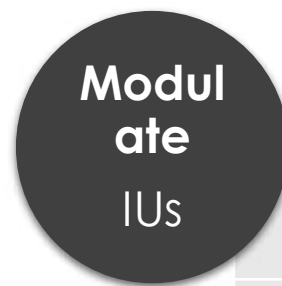
- Provisioning (8)
- Regulating (9)
- Cultural (4)



Valuation with generic databases - Values in US\$ 2018.

Each ES detraction % requires ecological adjustments:

- Intra-biome
- Damage function
- Recovery time



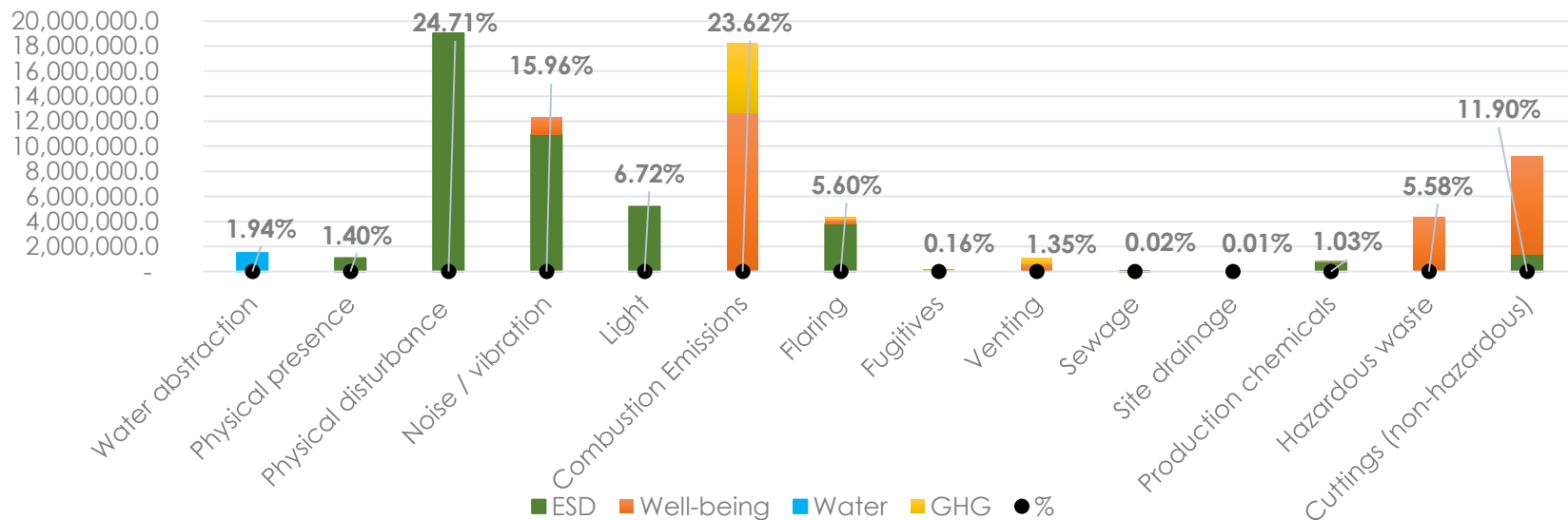
Adjust EEVs by using specific modulators – focus on management

Modulators examples:

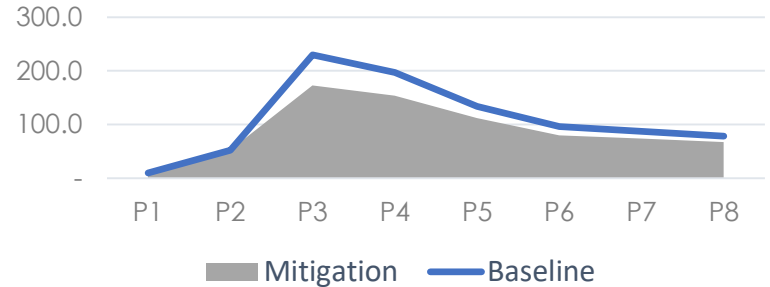
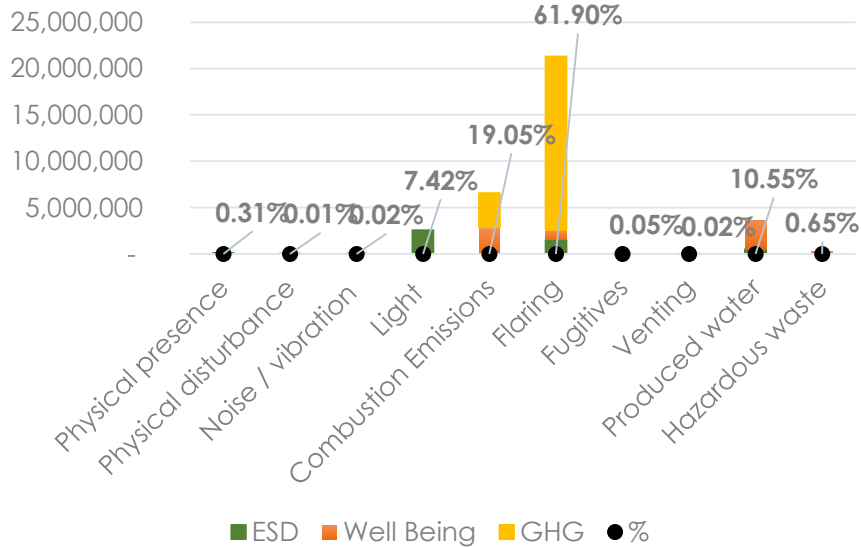
- Resource abundance
- Background condition
- Protection status of habitats and species
- Presence of indigenous and local communities



Case study: Onshore Asset



Case study: Offshore Asset

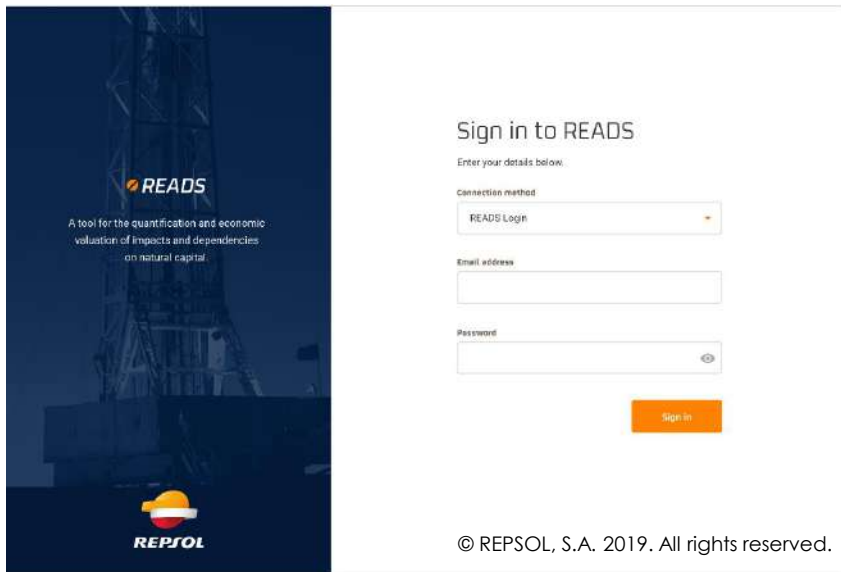


Mitigation	Return-Of-Investment (IUs / \$)	Effectiveness (%)
Routine Flaring	-1,20	-47%
Produced Water	-6,92	-2%

Impact vs. Production (IUs / MMbbl)	Baseline Condition	Mitigation Implemented
	2,84	1,68



Digitalization and Sustainability



READS
A tool for the quantification and economic valuation of impacts and dependencies on natural capital.

REPSOL

Sign in to READS
Enter your details below.

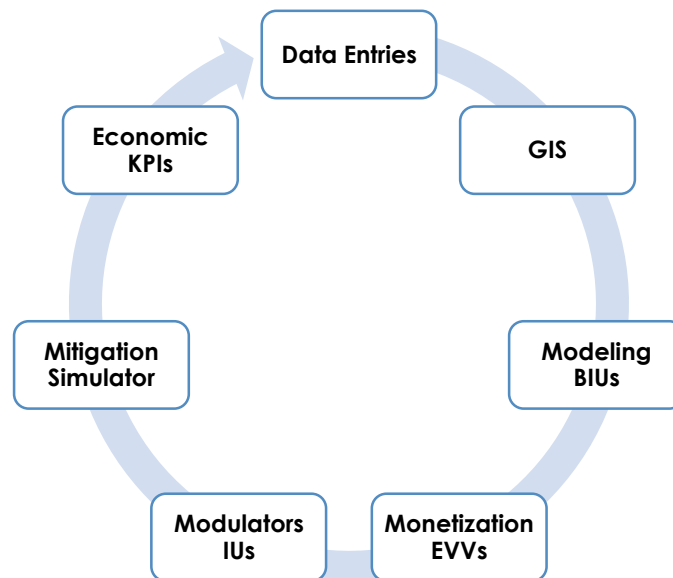
Connection method
READS Login

Email address

Password

Sign in

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Conclusions



READS is conceived as a management methodology that contributes to financial value creation by providing extra insight into Repsol's impacts and dependencies on the environment, allowing us to:

- Monitor our progress towards our ambition of neutral environmental impact.
- Prioritize our investments and support impact mitigation options.
- Follow and inform commitments to stakeholders and society.





Thank you for your interest
Any questions?

