

# 26<sup>th</sup> World Gas Conference

1 – 5 June 2015, Paris, France



Life Cycle Assessment of Organizations (O-LCA)  
An example of O-LCA applied to natural gas storage: the case  
of Storengy

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# Life Cycle Assessment / O-LCA specificities

- LCA principle
  - Impacts on the life cycle → “from cradle to grave”
  - Collect data → Inventory
  - Transform inventory in impacts
- LCA assets:
  - Systematic and known ;
  - Multi-criteria ;
  - Peer review
- What is specific to O-LCA ?
  - Boundaries of the organization
  - Environmental Indicators



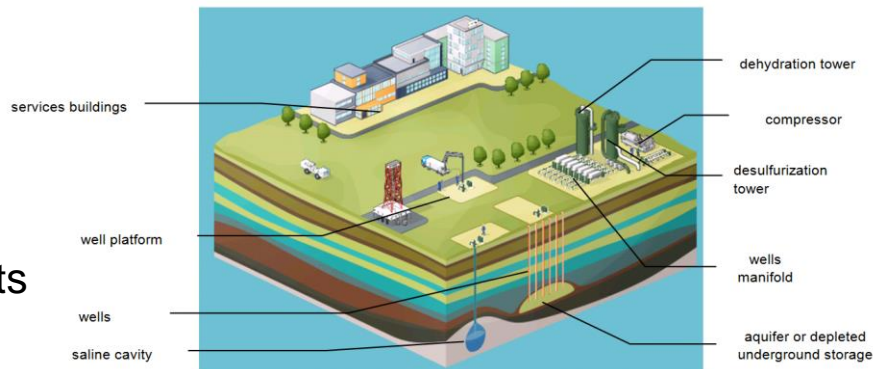
# Who is Storengy – Expectations on O-LCA

- **storengy**

- Operator in natural gas underground storage
- Operates in France, Germany and Great-Britain
- 1 100 employees

- Expectations on O-LCA

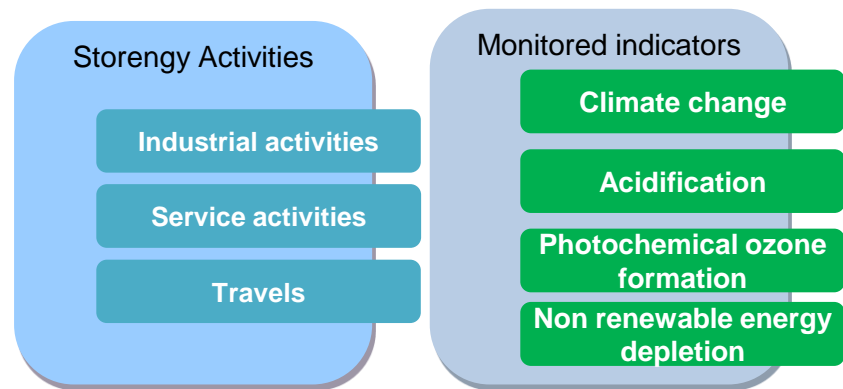
- Better overview of environmental impacts
- Avoid a potential pollution transfer for exploratory projects
- A global and transparent approach



Source: Storengy

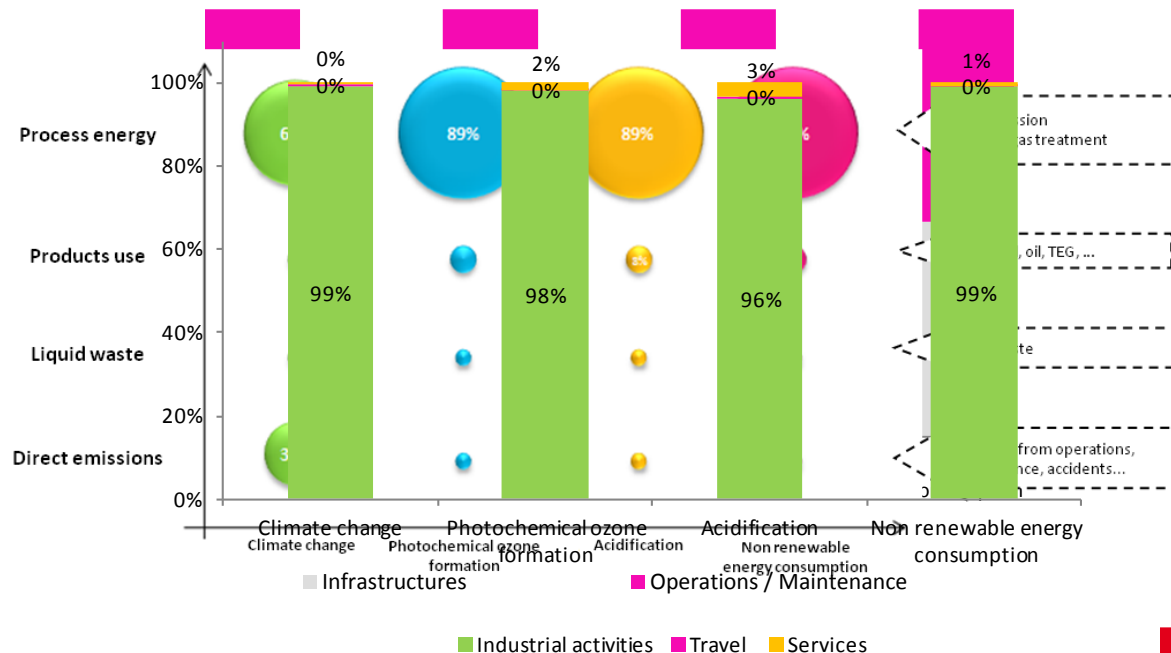
# Storengy's O-LCA main parameters

- Year (2011)
- France
- Indicators - chosen to represent :
  - Heating facilities and natural gas emissions
  - Energy used for facilities,
- Activities :
  - Industrial activities
  - Travels
  - Services



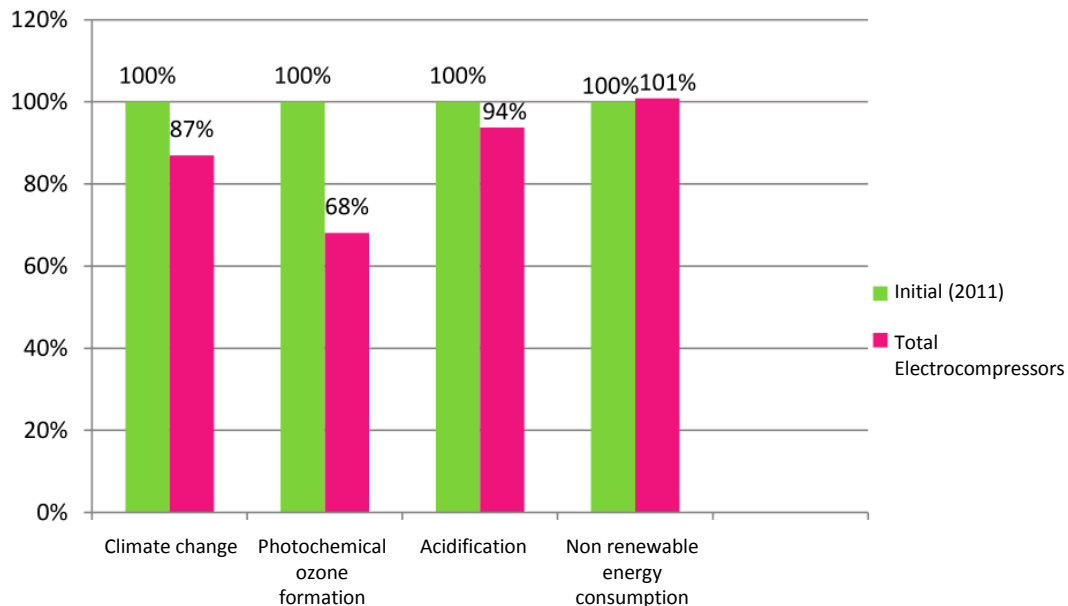
# Results on Storengy activities

- Industrial activities = 96 to 99% of all Storengy impacts, compared to travel and services
  - Operations represents the majority of industrial impacts
  - Energy consumption represent a big majority of impacts
  - A significant part also comes from direct emissions of natural gas (chromatographs, compressors seals...)



# Test of potential improvement

- Shifting turbocompressors to electrocompressors ?
  - Mainly reduction of impacts
- Burn chromatographs emissions, or compress them into pipelines ?
  - very low reduction compared to Storengy's impact
  - still important



# Conclusion

- Storengy initial expectations :
  - Environmental performance tracking
  - Prioritize actions
  - Environmental communication
- Other benefits:
  - Proportionate data tracing
  - Selection of relevant impacts
  - External view on internal practices
  - Precursory on O-LCA

**Storengy's O-LCA must be updated in 2015**

# Some reading you may find interesting...

- Guidance on Organizational Life Cycle Assessment, UNEP-SETAC, 2015, [http://www.lifecycleinitiative.org/wp-content/uploads/2015/04/o-lca\\_24.4.15-web.pdf](http://www.lifecycleinitiative.org/wp-content/uploads/2015/04/o-lca_24.4.15-web.pdf)
- ISO 14072:2014 “Environmental management - Life cycle assessment - Requirements and guidelines for organizational life cycle assessment”), 2014,



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