

Netherlands

We support  
Operators &  
Institutions  
transitioning  
to Hydrogen

NEL



## Hydrogen Projects



## Conferences & Journals



### Project Examples:

- Repurposing of Pipeline and Pipe work
- Asset integrity in repurposing existing natural gas infrastructure for Hydrogen
- Hydrogen Pipelines – Design and Materials Challenges and Mitigations
- Review of Hydrogen Procedures for suitability for hydrogen blended gas networks
- Assessment of the Acceptability of Injecting 10% Hydrogen into the National Transmission System
- Review of Company specification for steel pipelines (Natural Gas) against hydrogen pipeline specifications
- Laboratory material testing for oxygen inhibition of hydrogen embrittlement



# Our experience and knowledge in the field of hydrogen

**ROSEN**

empowered by technology

## Hydrogen Material Challenges

Clarification and aggregation of available information with respect to the effect of hydrogen on the structural integrity of steel pipelines and non-metallic pipeline materials.

## Hydrogen Integrity Assessments

Reviewing the available data and development of methods for the fitness for service assessment of pipelines exposed to hydrogen.

## Hydrogen Engineering Guidelines

Development of engineering guidelines for preparing natural gas networks for the accommodation of hydrogen.

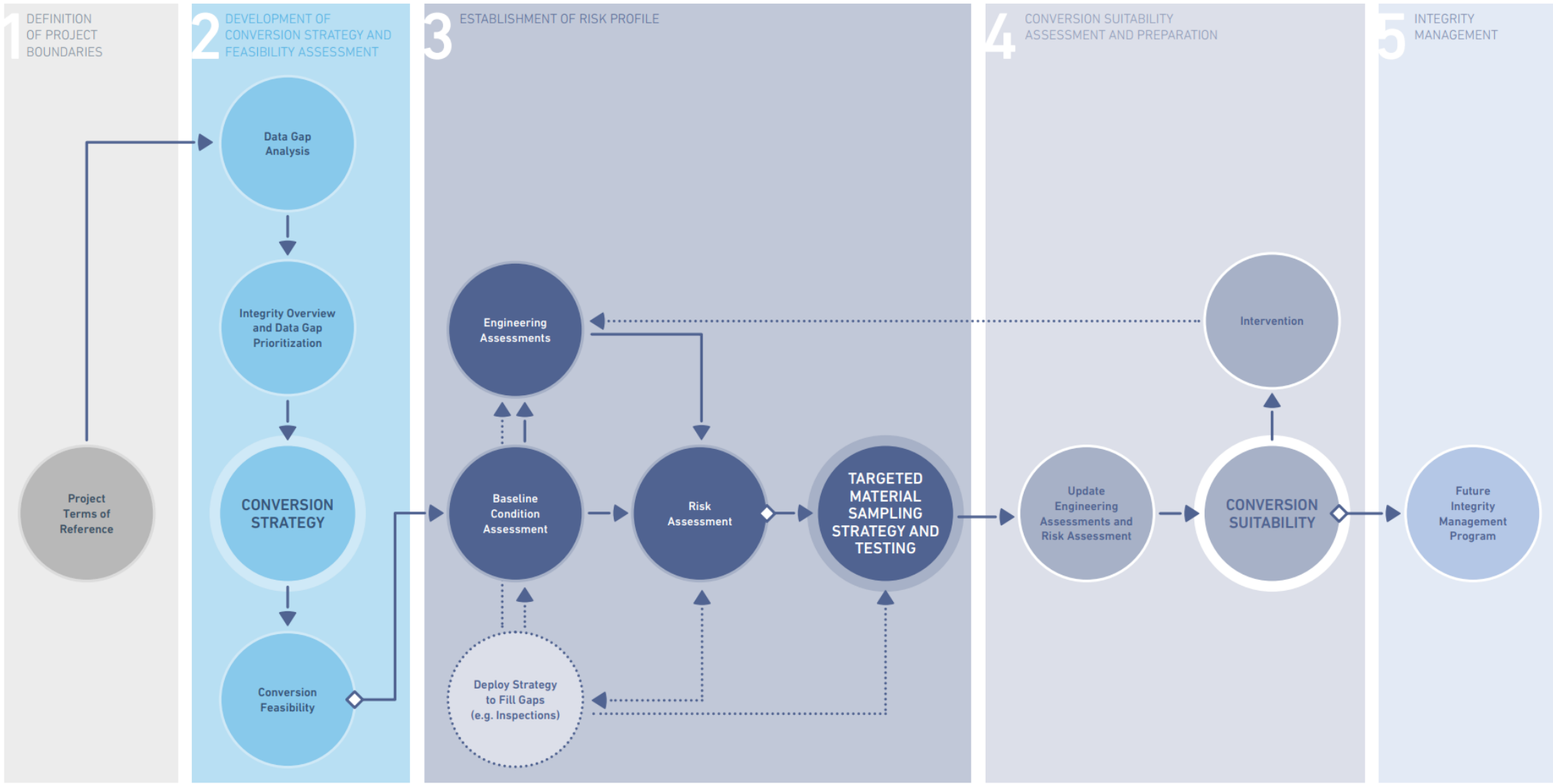
## Hydrogen Exposure Testing

Material compatibility tests of hydrogen exposed diagnostic components and equipment in hydrogen atmosphere.

## Hydrogen In-line Inspection

Realization of successful in-line inspection runs in 100% hydrogen pipelines during their operation.

# Hydrogen Repurposing Roadmap



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I would love to continue  
the conversation.

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