CCS in Barendrecht, the Netherlands
Learnings in Public Acceptance

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Presentation Outline

- Project description
- The National Playing Field
- The Local Value Proposition
- Developing a Public Acceptance Strategy
- Lessons Learnt
Refinery Pernis: 
nearly 1,000 KT pure CO$_2$ produced

Summer:  
380 KT CO$_2$ to some 500 greenhouse farmers

Annually:  
150 KT CO$_2$ to beverage industry

Winter:  
storage of 400 KT CO$_2$ in Barendrecht gas fields planned from 2012 onwards
The Barendrecht CCS project comprises

- Extension of existing compressor station at Shell Pernis refinery
- New CO$_2$ pipeline from Pernis to Barendrecht
  - 17 km, 14 inch, 40 bar
  - Mainly following existing pipeline corridors
  - Buried
- Modifications to gas production site
  - Placement of CO$_2$ injection compressors
  - CO$_2$ flow lines from compressors to wells
  - Work-over of the gas production wells
  - Monitoring equipment (for safety and emissions trading)
- Seismic baseline survey
Storage in gas field located at edge of Barendrecht
### History of the project

<table>
<thead>
<tr>
<th>Date</th>
<th>Event Description</th>
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<tbody>
<tr>
<td>23 Apr 2007</td>
<td>Minister of Environment gets budget for National CCS Tender</td>
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<td>5 Feb 2008</td>
<td>Shell organises first public hearing evening in Barendrecht</td>
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<td>27 Nov 2008</td>
<td>Minister Cramer announces selection of Barendrecht project</td>
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<td>From Feb 2008</td>
<td>Increasing negative media coverage, CO₂ horror stories</td>
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<td>26 Jan 2009</td>
<td>Shell publishes its Environmental Impact Assessment (EIA)</td>
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<td>19 Feb 2009</td>
<td>Emotional public hearing in Barendrecht with full media cover</td>
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<td>23 Apr 2009</td>
<td>EIA approved by authorities with only minor comments</td>
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<td>21 May 2009</td>
<td>Minister Cramer announces delay of decision to October 2009</td>
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<td>29 June 2009</td>
<td>Barendrecht Town Council votes against the CCS project</td>
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<td>18 Nov 2009</td>
<td>Responsible Ministers give go ahead after additional studies</td>
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<td>26 Jan 2010</td>
<td>Parliament rejects proposals to cancel the project, but asks Ministers to make changes to the project conditions</td>
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<td>28 Mar 2010</td>
<td>Very negative media coverage ‘CO₂ bomb under Barendrecht’; political support in the face of elections eroding</td>
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<td>13 Apr 2010</td>
<td>Ministers will not make ‘definitive’ decisions before elections</td>
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<td>20 May 2010</td>
<td>Parliament rejects proposal to cancel the project</td>
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<td>4 Nov 2010</td>
<td>New Government cancels the project</td>
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Three building blocks for Public Acceptance

Favourable **Playing Field**

Fair **Local Value Proposition**

Good **Engagement Plan**

Level of CCS-readiness of:
- Society in general
- Project neighbors in particular

All the pro’s and con’s of the project *from a local perspective*

Who, what, how, when, where

Possible **Public Acceptance**
The National Playing Field is built in stages

Urgency: Climate Change and Energy Security

Necessity of CCS (in addition to other options)

Sufficient knowledge and experience

Small demo’s:  - capture - storage

Large scale demo’s 2015

Frameworks:  - legal - financing - commercial -(spatial) plans

Specific Locations

People in Key Positions

Local Politics & Issues

General level

Time →

Specific Locations

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The Local Value Proposition must be acceptable

National (global) benefits

Local benefits

Local impact and risks

Challenge:

Negatives: here, now, “us”
Positives: there, later, “them”
Developing a Public Acceptance Strategy

1. Assess the Playing Field
2. Assess the Local Value Proposition
3. Together with the project partners define an action plan with:
   - Actions to improve the Playing Field
   - Actions to improve the Local Value Proposition
   - An integrated engagement strategy
4. Take time-out and assess the ‘do-ability’ of Public Acceptance
5. If yes, develop a project/partner-specific engagement plan
6. Implement, monitor, update.
Barendrecht - Lessons Learnt

- It is important to do things in the right order (Playing Field):
  - A good dialogue on local safety is unlikely if no one understands (or agrees) why the project is done
  - Mobilising local opposition without consensus is easy

- Build national, political consensus before announcing a project

- Tendering processes leaves little room for public participation

- Approach the project as a partnership between government, science and operator – all are part of the engagement program from the start

- Some form of local benefit should be considered for onshore projects
  - Preferably not a ‘negotiated’ compensation by company (‘bribery’)
  - A government imposed local storage fee is more transparent

- Avoid becoming an election topic – stay away from elections