



Åslaug Haga
Minister of Petroleum and Energy
Brussel
5 March 2008

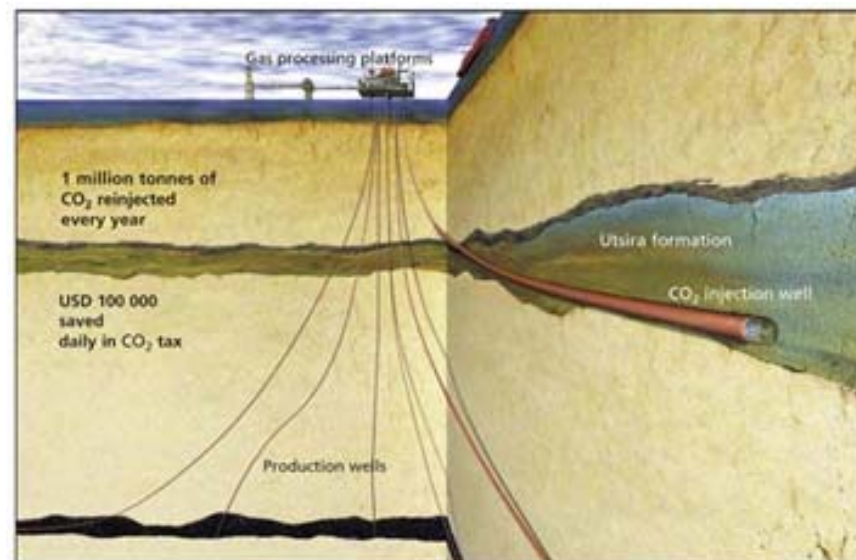
CCS in Norway

Current CCS projects

1. CO₂ Test Centre Mongstad
2. Large Scale Facility Mongstad
3. Large Scale Facility Kårstø

CO₂ Storage experience

1. Sleipner (11 years)
2. Snøhvit



CO₂ Test Centre Mongstad

- Investment decision Q4 2008
- Start-up 2011
- Two technologies
 1. Amine
 2. Chilled Ammonia
- Capture: 100 000 tons CO₂/yr
- Will develop, test, verify and demonstrate technologies to reduce costs and risks



DONG
energy



VATTENFALL



StatoilHydro

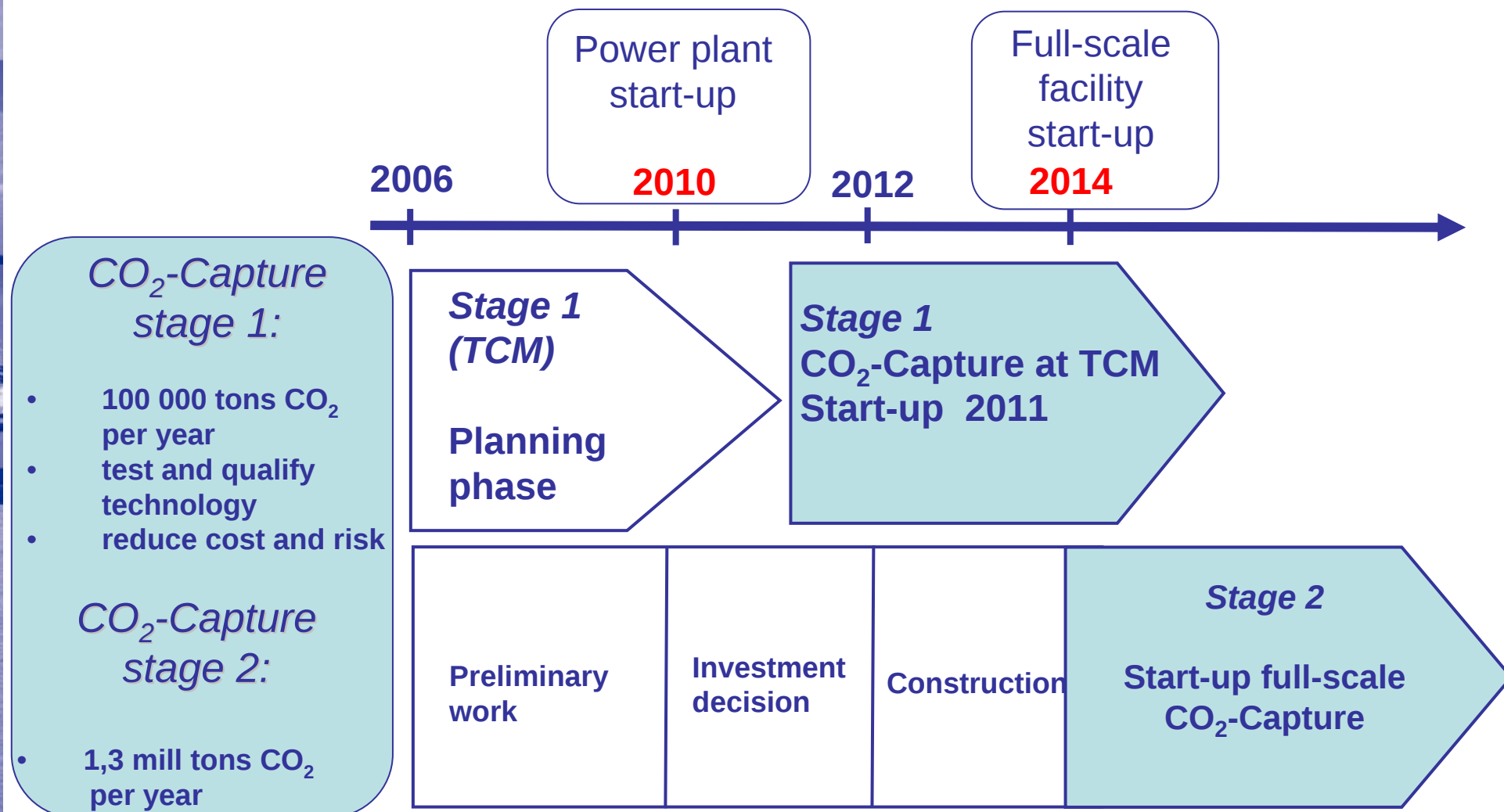
GASSNOVA

Large Scale CCS Facility at Mongstad

- Investment decision 2012
- Start-up 2014
- Capture at least 1,3 million tons CO₂
- Transport and storage; Utsira or Johansen formation
- The State and StatoilHydro



CO₂ Capture at Mongstad



CCS at Kårstø

- **The Government has decided to build a CCS plant at Kårstø**
 - retrofit facility connected to the existing gas-fired power plant
- **Capture of 1 million tons of CO₂/year**
 - existing technology will be scaled up by a factor of 10
- **2007 – 2009: planning phase**
- **2009: investment decision**
- **Transport and storage:**
Utsira or Johansen formation
- **NVE: Capex NOK 5 bill (2006)**



CO₂ Transport and Storage

CO₂ from Mongstad and Kårstø will be stored in geological structures offshore; Utsira fm and Johansen fm are being evaluated

