A business case for sustainable development
"Sustainability companies not only manage the standard economic factors affecting their businesses but the environmental and social factors as well. There is mounting evidence that their financial performance is superior to that of companies that do not adequately, correctly and optimally manage these important factors."

The Dow Jones' Sustainability Group Index
Norsk Hydro 2001

Transforming natural resources into necessities of life

✔ Key Figures 2000:
  ➤ Operating revenues: USD 18 billion
  ➤ Operating income: USD 3.2 billion
  ➤ 38,000 employees in over 60 countries
Hydro Oil and Gas' International Core Areas

- Norway
- North-West Russia
- Canada
- Iran
- Libya
- Angola
- Gulf of Mexico
Paula Viegas
Angola - Key Figures

✓ Socioeconomic Data (UNDP 2000)

- Population: ~13 million
- Population growth: ~3%
- Population under 15 yr. old: 45%
- Life expectancy: 47 years
- Under 5 yr. mortality rate: 1/3 (world’s 2nd highest)
- Adult literacy rate: 50% (men) - 70% (women)
- Enrollment rate in primary school: 29%
- Population under poverty line: 70%
- Displaced population (war): 10%
- Urban population in % of total: 50%
  (of which 25% population in Luanda)
- 2/3 of children will reach adulthood with 4 years or less of education
Investing in Angola's future

✓ Local industrial development and social projects
Quenguela Water System and Agriculture Program

✅ Quenguela Agriculture Program;
   - Support of Manioc production
   - Manioc processing
   - Experimental garden
   - Initiate vegetable production
   - Reforestation study
   - Abattoir study
   - Evaluate installment of fruit and vegetable packing facilities

✅ Quenguela Water System;
   - 7 water wells drilled in 1999 and 2000
   - 2 old water wells at Quenguela base
   - 17 km water line supplying Ramiro area
   - Total flowrate of 70 m³/hour
   - Generators to run the wells
   - Fountains where people can take water
   - Quality control of water by Sonangol
   - Laboratory
Investing in Angola's future

- Local industrial development and social projects
  - Quenguela regional development programs
- Management and Technology Cooperation Program
Management and Technology Cooperation Program

✓ Preparatory Year in Angola
  ➤ Angolan candidates - age 22 or below
  ➤ Selection based on extensive testing and interviews
  ➤ Train English Language to IELTS +5 level
  ➤ Train in Mathematics and Physics to University Entry Level
  ➤ Give knowledge in Computers
  ➤ Duration: 1 academic year

✓ Sending young, talented Angolans to British or American Universities to obtain degrees in
  ➤ Geology and Geophysics
  ➤ Mechanical, Chemical and Civil Engineering
  ➤ Petroleum Engineering
  ➤ Computer Science
  ➤ Business and Financial Management
Investing in Angola's future

- Local industrial development and social projects
  - Quenguela regional development programs
- Management and Technology Cooperation Program
- Compliance with Angolan laws and regulations and Hydro's global ethics
- Transparency
Investing in Angola's future

✓ Technical assistant to Sonangol

✓ 30% participation on Block 34
Our way - step by step

Reparation
- Regulatory requirements
- Safety and working environment

Prevention
- Eco-efficiency is no contradiction
- Eco-efficiency throughout the life-cycle

Business development
- The life cycle perspective

Sustainable conduct
- Creating business value
- Greenhouse gas abatements
- Social responsibility

Eco-efficiency is no contradiction
Safety and working environment
Organisational characteristics

Phase 1
- functional organisation
- from closed to open
- sharing best practices

Phase 2
- responsibility and accountability
- personal commitment
- measurements/documents

Phase 3
- customers/markets
- technological expertise
- innovation - conceptual minds

Phase 4
- sharing responsibility
- cultural understanding
- industry/consumer responsibility
- policy frameworks

Strategy integration

Strategy integration

Projects

Operations

Strategic impact

Time
Strategy integration

Competitive shareholder returns

Stay in the forefront:
- Environmental care
- Safety
- Community responsibility
- Ethics

Become leading performer...
- Profitability
- Growth
... in chosen segments

Industry leader:
- Interesting portfolio
- Rewards + performance management

Execution of business models that deliver superior value to customer
Our three ambitions

✓ Sustainable conduct - Norsk Hydro values
The Porsgrunn industrial complex in the 60's
The Porsgrunn industrial complex in the 90's
Our three ambitions

✓ Sustainable conduct - Norsk Hydro values
✓ Open communication - Stakeholder dialogues
Invitation to a dialogue
Our three ambitions

✓ Sustainable conduct - Norsk Hydro values
✓ Open communication - Stakeholder dialogues
✓ Innovation - Business development
Innovation
- the playing field for conceptual minds -

Ammonia fuelled car, Rjukan 1933

Source: "Worth a try"
Research and Development in Norsk Hydro through 90 years",
Oslo 1997 (page 125)
Hydrogen – the energy carrier of the future

2010 - 2050

Natural gas → H₂

Syngas production

2030 -

Electrolysis → H₂

H₂O → Fuel cell

H₂ → Heat

Electricity

CO₂ injection
Our three ambitions

✓ Sustainable conduct
  ➤ Norsk Hydro values

✓ Open communication
  ➤ Stakeholder dialogues

✓ Innovation
  ➤ Business development
Sustainability Scores

SAM Sustainability Corporate Assessment ("Dow Jones") 2000

Total Score
Opportunities*
Risks*
Economic Factors**
Environmental Factors**
Social Factors**

* max. 50%  ** approx. 33% of Total Score

Norsk Hydro ASA
Industry Average

0 10 20 30 40 50 60 70

%
Sustainability – opportunities and risks

SAM Sustainability Corporate Assessment ("Dow Jones") 2000

Sustainability Opportunities
- Strategic Approach to Opportunities
  - Strategic Planning
  - Org. Development
  - Environmental Charters
  - Stakeholder Involvement

Management Opportunities
- Quality Management
- Intellectual Capital Management
- IT Management
- Environment & Social Reporting
- Employee Benefits
- Remuneration
- Employee Satisfaction
- Environment Profit & Loss Acc.

Industry Specific Opportunities
- Management
- Industry Average

Sustainability Risks
- Strategic Approach to Risks
  - Corporate Governance
  - Environment Responsibility
  - Environm. Policy
  - Social Responsibility
  - Social Policy

Management Risks
- Risk & Crisis Management
- Environment Management/Performance
- Corporate Codes of Conduct
- Child Labour/Equal Rights
- Conflict Resolution/Discrimination
- Occupational Health & Safety
- Layoffs/Freedom of Association
- Standards for Suppliers

Norsk Hydro ASA Industry Average
Towards sustainability - business from reactive to proactive

- Dialogue and understanding
- Communication
  - Reputation
  - Reducing risks
  - Internal focus
- Innovation
  - New markets
  - New concepts
- Conduct
- Business: From reactive to proactive
Towards sustainability - governments from protectionism to globalization

Governments:
From protectionism to globalization

- National
  - Goals
  - Instruments

- International
  - Global challenges

- Global governance
  - Example: The Kyoto protocol
Towards sustainability - demanding challenges

Governments:
From protectionism to globalization

National

International

Global governance

Level playing field

Communication

Conduct

Business:
From reactive to proactive

Innovation
"Sustainability companies not only manage the standard economic factors affecting their businesses but the environmental and social factors as well. There is mounting evidence that their financial performance is superior to that of companies that do not adequately, correctly and optimally manage these important factors."

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