USING TECHNOLOGY TO ENERGIZE THE WORLD IN THE 21st CENTURY

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President
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We have an important job: Help 6+ billion people get their energy every day!

- During the next decade, world population will grow by 1 billion, to 7 billion.
- That means that there are 250,000 additional customers of energy every day.
- Each of these 250,000 new customers will share the aspirations of most of us:
  - lights at home
  - heating or cooling
  - mobility and transportation
  - environmentally sustainable energy supply
  - affordable price of energy?

Approximate scale over city of Houston, Texas
(Illustration is by: TECHNIP)

OUTLINE
THIS IS HYDRO
Growth Strategy Execution
Examples
Gulf of Mexico
Yet-to-Find Potential
The importance of Jack!
Hurricanes
Any ‘Easy Buttons’?
Using Technology
To create value
To solve problems
Corporate Technological Responsibility (CTR)
Founded in 1905
No. 216 on Fortune Global 500
No. 178 on Forbes Global 2000
Leading offshore E&P company; 615000 boepd production target in 2006
SEC reserves: Around 2 billion barrels
Market Capitalization Value, April 2006: Around 35 billion USD
Investment level per year: 4 - 5 billion USD
33000 employees in 36 countries
Pioneer in renewable energy (hydro-power, wind, hydrogen, wave-power,…)
World’s no.3 in aluminium
Hydro’s mission is to create a more viable society by developing natural resources and products in innovative and efficient ways.
Competitive Shareholder Return

Total shareholder return (TSR) 1 Jan 2000 - 2 Dec 2005 (excl. Yara)

Source: Datastream 2 Dec 2005, NYSE, USD
HYDRO’S CORE VALUES

- COOPERATION
- RESPECT
- DETERMINATION
- COURAGE
- FORESIGHT
Profitable Production Growth

- 2006 target: 615,000 boed
- 2010 expected: 750,000 boed
- Compound annual growth rate
  - 2001-2008E: 8%
  - 2005-2010E: 6%
- Increased production outside Norway

* 8% Compound Annual Growth Rate 2001-2008, 2001 baseline
** 6% Compound Annual Growth Rate 2005-2010, 2005 baseline
Co-operation & Co-Evolution

Hydro could not have achieved what I am about to show today were it not for the co-operation and co-evolution over the years with:

- Partners
- Service companies/Technology providers
  - Suppliers/contractors/vendors
  - Universities/Institutes
- Authorities
WHY OPERATE?

- Can generally generate more value
- Can utilize new technology to cut costs & harvest upsides
- Gives more control (concept & cost & schedule & HSE)
- Can cash in on corporate synergies (Frame agreements, Big buyer adv...)
- Gives deep learning & keeps staff at the leading edge
- Instills pride & team spirit in the organization
Hydro E&P Activity Overview

- Norway
- Russia
- Angola
- Canada
- Denmark
- Libya
- Vietnam
- Mexico
- Brazil
- Nigeria
- US Gulf of Mexico

Current E&P activity
Hydro has Serious Deep Water Competence
Norwegian Operations: Hydro’s Bread and Butter

- Hydro operates close to 900,000 boepd as operator on the NCS
- Strong focus on safe, efficient and smart operations
- Consistent top-quartile performer
- Basis for future growth on the NCS: Exploration, IOR, New Developments
Maximize NCS value

- Large IOR potential
- 15 new fields under development
- Exploration success
- ~40 exploration wells 2006-2007
WHAT CAN WE DO TO LOWER OPERATING COSTS?

Integrated or e-operations!

Source: Fast Company
The Driver: Dramatic Increase in Unit Op. Costs
More HCs & Lower Costs with Integrated Operations

Development of new best practice collaboration arenas between offshore and onshore through extensive application of new information and communication technologies
The NCS broadband fibre network brings offshore and onshore together: A new setting
Enormous amounts of data “produced” from our offshore operations.....
Integrated Operations – A "GLOBAL" Perspective

Offshore

Service Companies

New Collab. models

Hydro Sandsli
Integrated Operations – How?

New information and communication technologies
- Broadband secure network
- Upgraded IT infrastructure
- Intelligent real time information workspaces
- 3D visualizations
Integrated Operations - How?

New information and communication technologies
- Broadband secure network
- Upgraded IT infrastructure
- Intelligent real time information workspaces
- 3D visualizations

New best practice work processes
- Drilling and well operations
- Production and process optimization
- Operations and maintenance
- Logistics and marine operations
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New best practice work processes
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New ways to organize the work
- Decision making onshore organization
- Executing offshore organization
- Keeping continuous focus on HSE
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Large Yet-To-Find Potential and Large PUD Resource Base in the Arctic

Share of world’s Undiscovered Hydrocarbons

- Arctic region 24%
- Rest of the world 76%

Source: USGS, Future Oil and gas Reserves of the World 2002
Large discoveries in the Barents Sea: Russian and Norwegian side
Underexplored area
The Next ‘BIG Place’?
International Breakthroughs & How?

Type: NCS vs ECC Asset Swap
International Breakthroughs & How?

Canada – Hebron moving towards development

Iran: World-class oil discovery

Type: Exploration Contract
International Breakthroughs & How?

Canada – Hebron moving towards development

Iran: World-class oil discovery

Штокмановского ГКМ - Shtokman short-listing

Type: Long-term presence, bus dev based on track record/competence & cooperation
International Breakthroughs & How?

Canada – Hebron moving towards development

Iran: World-class oil discovery

Штокмановского ГКМ - Shtokman short-listing

Angola: Angola: Moving ahead with Gimboa (Block 4)

Type : Strategic Alliance
International Breakthroughs & How?

Canada – Hebron moving towards development

Iran: World-class oil discovery

Штокмановского ГКМ - Shtokman short-listing

Angola: Angola: Moving ahead with Gimboa (Block 4)

Libya: Secured operatorship in NC146

Type: Concession Round
International Breakthroughs & How?

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Штокмановского ГКМ - Shtokman short-listing

Angola: Angola: Moving ahead with Gimboa (Block 4)

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Brazil: Chinook Heavy Oil

Type: Asset Acquisition
International Breakthroughs & How?

Canada – Hebron moving towards development
Iran: World-class oil discovery
Штокмановского ГКМ - Shtokman short-listing
Angola: Angola: Moving ahead with Gimboa (Block 4)
Libya: Secured operatorship in NC146
Brazil: Chinook Heavy Oil
GoM: Spinnaker Exploration Company

- Hydro leases and fields
- Spinnaker deepwater leases and fields

Type: Company Acquisition (SKE)
International Breakthroughs: Frontier Positions

- Canada – Hebron moving towards development
- Iran: World-class oil discovery
- Штокмановского ГКМ - Shtokman short-listing
- Angola: Angola: Moving ahead with Gimboa (Block 4)
- Libya: Secured operatorship in NC146
- Brazil: Chinook Heavy Oil
- GoM: Spinnaker Exploration Company
- Exploration acreage secured world-wide
THE SPINNAKER ACQUISITION

Spinnaker: A listed Houston-based E&P company active in the Gulf of Mexico and Nigeria
A rather large international E&P deal @ 2.5 billion USD

P4 = 80
As of December 13, 2005 HGOM was for business!
Focus: Profitable Growth in GOM
- HSE: The license to operate
- Production
- Deliver exploration successes (rig coverage)
- Integrating two cultures: Alignment
- New Business Plan
- New Longer Term Goals & Strategy
- Attract, Retain & Motivate Staff
- Keep Hydro Competitive in Houston
- Bus. Dev: Lease sales, farm-ins, acquisitions...
A GREAT FIT!

500 TB Seismic Data
Large Prospect portfolio
Lease winners in lease sales
Oil & Gas finders
Rig finders
Large local network
Speed and quick decisions
Street Smarts

Financial Muscle
Prospect portfolio (compl.)
Operator skills
World-class:
- Drilling skills
- Project execution skills
- Subsea skills
- Long-dist tie-back skills
The main reason for buying companies used to be reserves ONLY:

P1, P2, P3 VOLUMES

PROVEN
PROBABLE
POSSIBLE

Today, a company’s future, more than ever, depends on:

P4 = THE PEOPLE

Only People Make it Happen: Hence, ‘P4’ carries more & more weight!
Some of our new colleagues……
THE COMBINED PORTFOLIO IS OUR STARTING POINT
Hydro acquired 14 new blocks in Lease Sale 198 (11DW +3S) on 3.15. Hydro operates 10 of the 14

17 Hands
Telemark
Mirage
FrontRunner
San Jacinto
Independence
Hub
Thunderhawk
Spiderman
Lorien
Zia
Teledra
Trident

Total number of blocks in GOM : 449 (Hydro Operates 324)
GOM Company Ranking by Deepwater Lease Ownership

Source: Goldman Sacks
Now to the key question everybody is asking about GoM: 

ANY OIL LEFT OUT THERE?
Gulf of Mexico – Large Yet-to-Find Potential

MMS: 56 billion recoverable barrels remain to be found in deepwater GOM

Source: Wood Mackenzie
Salt Impacts Two Thirds of the Deep Water
Image Improvement is the Key: Pre-Stack Depth Data is Required

- Salt Adds Complexity
- Large Area / Very Immature
- New plays emerging
- Recent Discoveries
GREAT DATA
Oil is found in your mind first

Great Minds

(P4)
Dennis Duncan
Shelf Exploration Manager
To explore in deepwater GOM, where one well can cost 100 million dollars, you need

- Rigs
- Insurance
- Money
- Prospects

‘WORLD OIL’ predicts: $57/BBL in 2006
A SCREAM!

Why Scream?
A dry well?
Katrina and Rita: The greatest natural disasters in the history of GOM
"For the 2006 season, Tropical Storm Risk forecasts 15 tropical storms with eight being hurricanes and four of those being intense hurricanes."

Professor Mark A. Saunders
Tropical Storm Risk

Source: Prof. Mark A. Saunders, Lead Scientist, Tropical Storm Risk, Benfield Hazard Research Centre, University College, London UK
HURRICANE IMPACTS (E&P CONTEXT)

- HSE
- Lost production
- Delays
- Shortages
- Cost increases
- Insurance rates up
- Season starts June 1

Source: Paul Lachine
FPSOs with ‘quick disconnect’?

Is there a 

HURRICANE ‘EASY BUTTON’?

Source: Staples
We need to look for new types of GoM field developments:

The cost of doing nothing different is probably higher than the cost of doing something different!
GoM Deep Water Production Increase by Year (1985 - 2005)

Source: MMS
GOM OIL PRODUCTION: UP - FLAT - OR DOWN?

Source: MMS
Recent Ultra-Deep Water Activity
Paleogene (aka Eocene/Wilcox) Play

Recent Discoveries

New Wells

Source: MMS
ALL EYES ARE NOW ON ‘JACK’

Positive Well Test: Commercial well rates - economic developments - rigs needed - Eocene=$$$$

Negative Well Test: Changes everything?, booked rigs not needed?, Eocene = ???
THE 'JACK' WELL TEST IS A 2006 'CLIFFHANGER'

SHOULD WE STAY IN THE EOCENE PLAY?
‘SOLD OUT’
- Very high Deep Water rig-rates & Shelf rig rates also are 2-3 x the ‘old’ rig rates
- Long-term contracts/options exercised
- New-built/Conversions coming in
- Challenges: Deep & Demanding wells, Loop currents, Hurricanes, Insurance, People

Sorry, but we’re SOLD OUT
Come back in 2009!
According to www.offshore.no
- 65 new drilling rigs/ships by 2009
- 48 jack ups, 14 semis, 3 ships
- 9 in ‘06, 19 in ‘07, 15 in ‘08, 3 in ’09
- Pricetag: 20 billion USD

Petroleum News April 2, 2006
For Transocean’s 5th generation rig ‘Discoverer Enterprise’:
520,000 $/day for 3 yrs from Dec. 2007

Source: Rigzone
GOM ALWAYS NEEDS NEW TECHNOLOGY

CORPORATE TECHNOLOGICAL RESPONSIBILITY (CTR) = TO FLY IN FRONT OF THE V SOMETIMES

PS: ‘A rising tide lifts all the boats’
There is always a better way

Good

Better?

Best??

Necessity is the mother of invention?
Until someone tries to swim ‘the other way’, nothing changes
Horizontal wells: It took us too long.....

Source: Anadrill Schlumberger and Oil and Gas Journal
Using Technology to Create Value & To Solve Problems

- Hydro has been driving innovation and new technology in several key E&P areas:
  - Integrated (onshore-offshore) operations (e-operations)
  - Advanced drilling
  - Subsea separation (removing water subsea from the wellstream and reinjecting it in a sea floor disposal well)
  - Long distance sub sea tie-backs
  - Subsea compression
What New Could We See Coming in GOM?
IF THE EOCENE DISCOVERIES HAVE SUCH LOW PERMEABILITY & HIGH OIL VISCOSITY:
HOW ABOUT MULTI-LATERAL WELLS?

Source: Fast Company
Hydro early mover in drilling technology

- 47 multilateral wells drilled with 76 branches
- Hydro has drilled 50% of the world’s advanced multilateral wells
- Hydro has drilled 88% of the world’s advanced offshore multilateral wells
- Hydro now drilling the first six-branched well on NCS (we’ll ‘talk to’ 45000 ft of pay instead of 36 ft in a vertical well)
TROLL OIL
MORE THAN 100 HORIZONTAL WELLS DRILLED TO DATE
FROM: UNECONOMIC
TO: 1.5 BILLION BBL RECOVERABLE
MOVE THINGS AWAY FROM THE HURRICANE

WE PUT THE OIL WATER SEPARATOR ON THE SEA FLOOR
WHY DON’T WE JUST DO AWAY WITH PLATFORMS? :
LET’S MOVE EVERYTHING SUBSEA!

Source: Fast Company
LONG DISTANCE TIE-BACKS
THE DEFINITION OF ‘LONG’ KEEPS CHANGING

- **Oseberg SS**
  - Distance: 7 km

- **TOGI**
  - Distance: 42 km

- **Ormen Lange**
  - Distance: 120 km

- **Shtokman?**
  - Distance: 555 km
Ormen Lange – Discovered in 1997 – 15 Tcf

Iceland

Scotland

Norway

Ormen Lange
Ormen Lange: Subsea-to-Shore Concept

- Multiphase flow and hydrate control
- Long tie-back
- High-capacity wells
- The driving force behind SUBSEA COMPRESSION now under development
Future Subsea Compression Unit
Connection to Existing Subsea Facilities

Template B
1150 tons

Template A
PLET
350 Tons

2 x 30”
75 Miles
to Shore

2500 ft
Water Depth
New Field Developments in GOM and Other Places May Soon Look Like This?

(Everything is on the seafloor)
TECHNOLOGY TO ENERGIZE THE WORLD

FAST FORWARD
THANK YOU!
Cautionary Note

The United States Securities and Exchange Commission permits oil and gas companies, in their filings with the SEC, to disclose only proved reserves that a company has demonstrated by actual production or conclusive formation tests to be economically and legally producible under existing economic and operating conditions. We use certain terms in this presentation material, such as expected recoverable resources, that the SEC’s guidelines strictly prohibit us from including in filings with the SEC. Investors are urged to consider closely the disclosure in our Form 20-F, SEC File No. 1-9159, available from us at our Corporate Headquarter: Norsk Hydro, N-0240 Oslo, Norway. You can also obtain this form from the SEC by calling 1-800-SEC-0330.
Hydro is a Fortune 500 energy and aluminium supplier founded in 1905, with 36,000 employees in nearly 40 countries. We are a leading offshore producer of oil and gas, the world's third-largest integrated aluminium supplier and a pioneer in renewable energy and energy-efficient solutions. As we look forward to our next 100 years, we celebrate a century of creating value by strengthening the viability of the customers and communities we serve.

www.hydro.com