Global Strategy

Remain the worldwide leader in CO_2-free energy

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Agenda

- Global Challenge and Opportunity
- AREVA's Unique Position and Diversified Offerings
  - Nuclear Energy
  - Solar
  - Biomass
  - Offshore Wind
- Integrated Response – Energy Parks

AREVA's Footprint in North America

>6,000 Employees in 45 locations in U.S.

Plus >1,000 in Canada & Mexico

- **N. American sales = $2.5 billion**
  - **15% of AREVA's total revenues**
  - **Near 5-fold growth since 2000**
- **More than $3 billion of investment in the 5 coming years**
- **Investing in human capital: 700 new hires in the US every year**

AREVA in North America
Note: These are specific to US objectives

Our Mission

- Expand clean reliable and affordable sources of energy
- Provide energy sources that are safe, sustainable, and economical
- Create jobs, reduce fossil fuel reliance, and ensure energy security

Our Strategies

- Lead US nuclear renaissance with construction of the US EPR™ reactor
- Close nuclear fuel cycle by providing recycling services as an option
- Establish US nuclear enrichment capabilities
- Lead solar market with concentrated solar power generation and manufacturing
- Build fleet of US biomass plants
- Establish market-share leadership in offshore wind market and localize manufacturing and assembly

Global Challenges
Focus AREVA's Strategy

- **Energy Challenges**
  - **Worldwide increase in energy demand**
    - Demand for energy predicted to increase 50% by 2030
    - Demand for electricity to double in the next 20-25 years, due to demands from emerging countries
  - **Expected short supply of fossil resources**
    - Demand for oil and gas to increase, but supply questionable
    - Increasingly driven by high growth in emerging countries
- **Climate challenges**
  - **International efforts to control greenhouse gas emissions**

AREVA Uniquely Positioned

- Nuclear and Renewable energy are effective responses to energy and climate challenges
- Focused strategy on providing exclusively CO_2-free energy solutions
  - Number one nuclear energy provider in the world
  - Expanding renewable energy portfolio
  - Divesting Transmission and Distribution division
- Establishing domestic industry by making major investments in the US
  - Investing >$3B over next 5 years in the US clean energy infrastructure
- Building relationships with suppliers and educators
  - Supplier Day workshops
  - Virtual university
  - Job training

AREVA's Nuclear Energy Portfolio

Global Scope

- **World Leader In Commercial Nuclear Services Business**
  - **No. 1 in complete nuclear cycle and reactor construction**
- **No. 1 Supplier Of Nuclear Energy Products And Services In US**
  - **2008 U.S. Sales Revenue $2.5 Billion**
- **Leader In Major Nuclear Investments In US Capabilities**
  - **More than $160 million capital improvements and workforce development over past five years in nuclear business**
  - **$400 million new heavy forging manufacturing and engineering facility in Virginia**
  - **Planned multibillion dollar investment to build uranium enrichment facility in Idaho to ensure domestic fuel supply**
  - **$200 million for certification of US EPR™ Reactor**
- **12% of AREVA products sold worldwide are exported from the US**

EPR IN CONSTRUCTION

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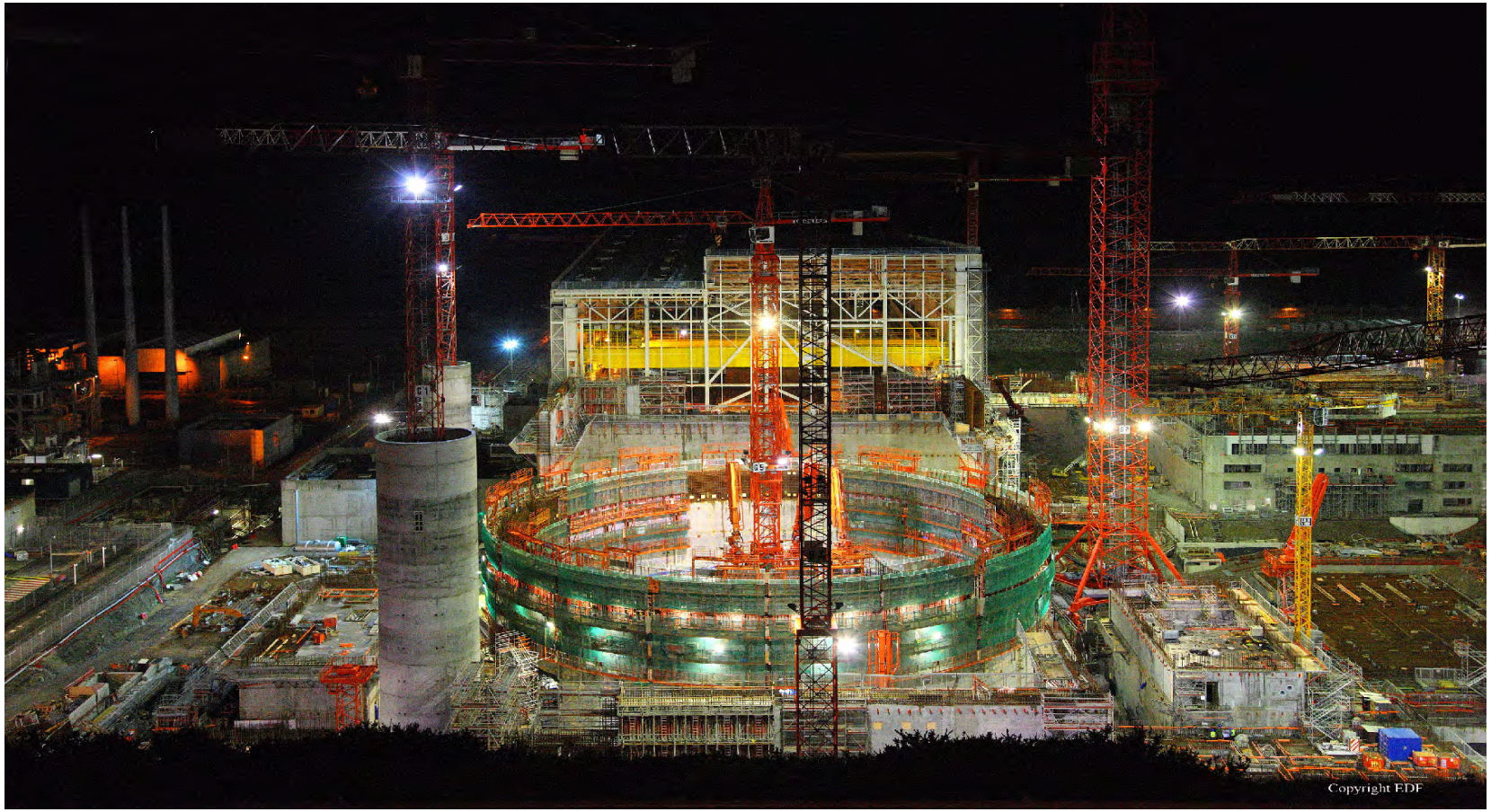
EPR IN CONSTRUCTION



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AREVA Solar

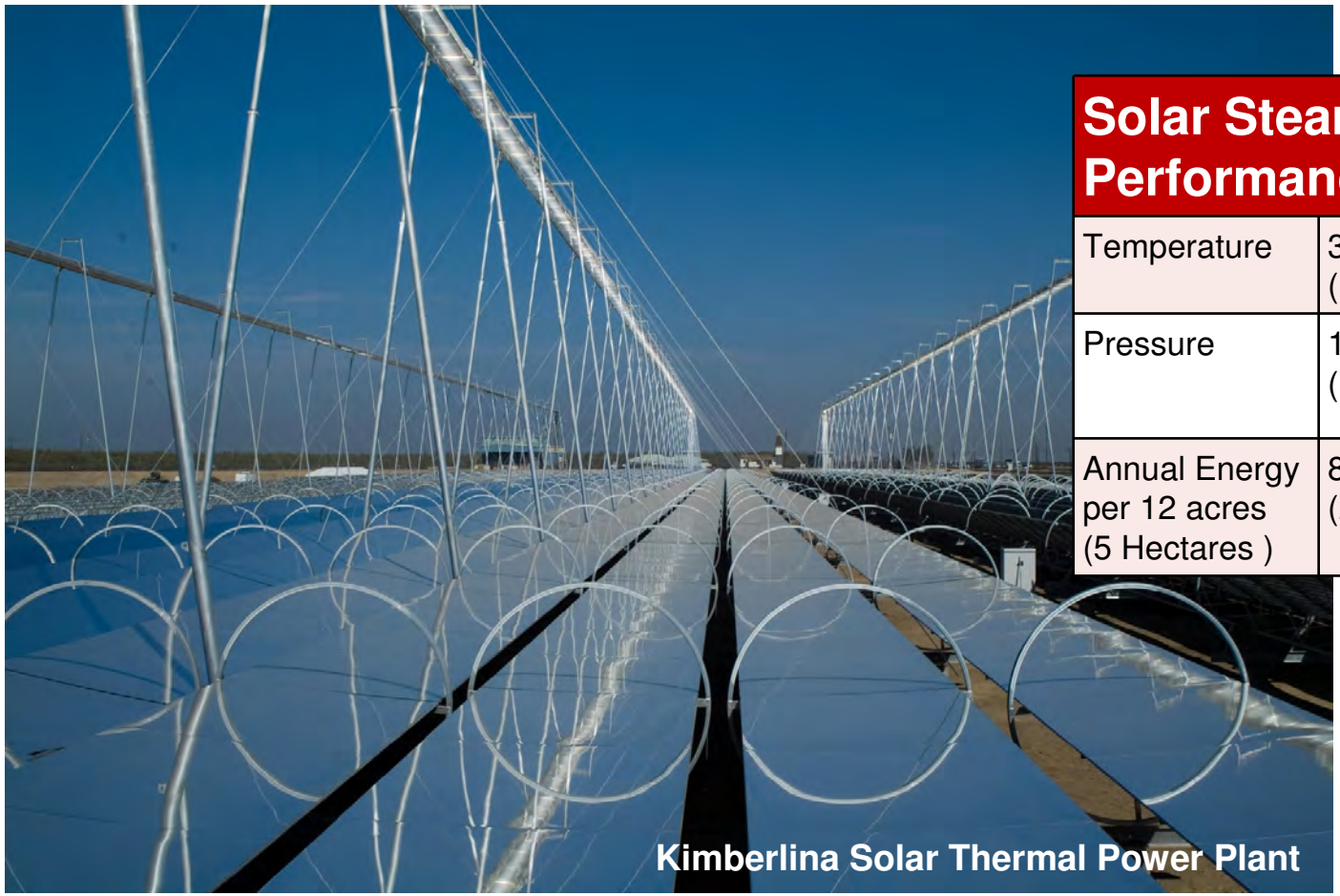
Solar Overview

- **Mission**
  Develop and deploy solar energy technology to serve customers' global electricity and thermal energy needs in a dependable, market-competitive, environmentally responsible manner
- **Locations**
  - Corporate headquarters – Mountain View, CA
  - Manufacturing – Las Vegas, NV and Singleton, NSW, Australia
  - Operations – Bakersfield, CA and Singleton, NSW, Australia
  - Business development – Mountain View, CA; Phoenix, AZ; and Melbourne, Australia
- **Name Change**
  - From Ausra to AREVA Solar
  - Announced March 2010

Strategic Goals

- Become a world leader in utility- and booster-grade Concentrated Solar Power generation (CSP) - Acquired technology leader Ausra Solar in early 2010
- Innovate, develop and deliver next generation of solar plants
  - Deliver highest efficiency in cost/KWh, land and water usage
  - Establish grid parity
- Help customers meet increasing RPS requirements with cost-effective solution
- Complement and enrich AREVA portfolio solutions deployment by offering co-generation options
- Differentiate through mature AREVA technology and project expertise

Scalable Steam and Energy Generation



Solar Steam Performance	
Temperature	300°F to 900°F (150°C to 480°C)
Pressure	100 to 1,740 psia (7 to 120 bara)
Annual Energy per 12 acres (5 Hectares)	88,500 MMBtu (25,950 MWh)

1 Solar Steam Boiler = 7.5 MW Thermal ≈ 2.5 MW Power

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ADAGE Biomass

AREVA / Duke Energy Joint Venture

Bioenergy in the US
ADAGE a 50/50 JV AREVA – Duke Energy

ADAGE™
An AREVA/Duke Energy advanced biopower company

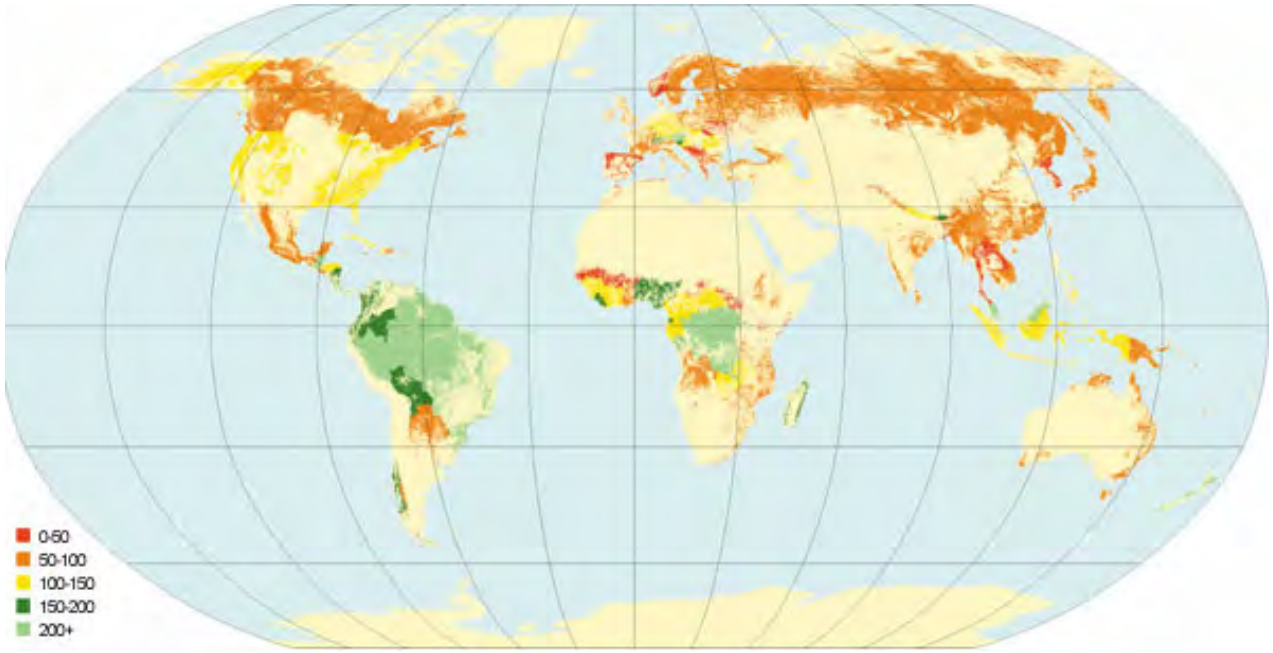
- **Launch at Clinton Global Initiative Sept 2008**
- **Plan to build 12 new 50 MW standard biopower plants using wood wastes over the next five years (can scale higher if demand)**
- **Combines the strength of two major energy companies → first U.S. biopower joint venture between major energy companies:**
  - **AREVA is lead EPC**
    - World leader with over 2,500MW installed
  - **Duke Energy Generation Services will be the lead operator**
    - Currently manage over 6,500MW in the US
- **Fully integrated solutions**
  - **Site selection**
  - **Design, construction, and operations**
  - **Power purchase agreements and fuel contracts**

Duke Energy AREVA ADAGE

Technology

- **Define a standard plant repeatable across US => Reference Plant**
  - **Standard steam and power block**
  - **Fuel handling, civil works and grid connection specific to each site**
- **Design an optimized and competitive product adapted to the US market, environmental friendly and allowing fast permitting**
  - **Maximization of the value for the investors = Value Management**
  - **Emission constraints for minor source compliance and reduced water consumption**
  - **US norms and standards**

Above-ground Woody Biomass



http://www.fao.org/forestry/en/

- Sustainability
  - **New jobs per plant (direct/indirect) Construction 750; Permanent 250**
  - **Carbon neutral**
  - **Keep land as forests**
- US Forestry Statistics
  - **1/3 of US is forested**
  - **750 million acres**
  - **US DOE and USDA estimate 10,000MW of sustainable supply**

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AREVA Offshore Wind

M5000 Wind Turbine – Designed for Offshore

- **Leading-edge M5000 technology for 5 MW offshore wind turbines**
  - **Hybrid drive-train solution**
  - **1-stage gearbox**
  - **Lightweight**
  - **High output**
  - **Corrosion protection through air filtering**
  - **Redundancy of subsystems and sensors**
  - **Condition monitoring of drivetrain and main subsystems**
  - **Simplified maintenance**
- ***4 years of operation onshore***
- ***6 turbines installed in North Sea***

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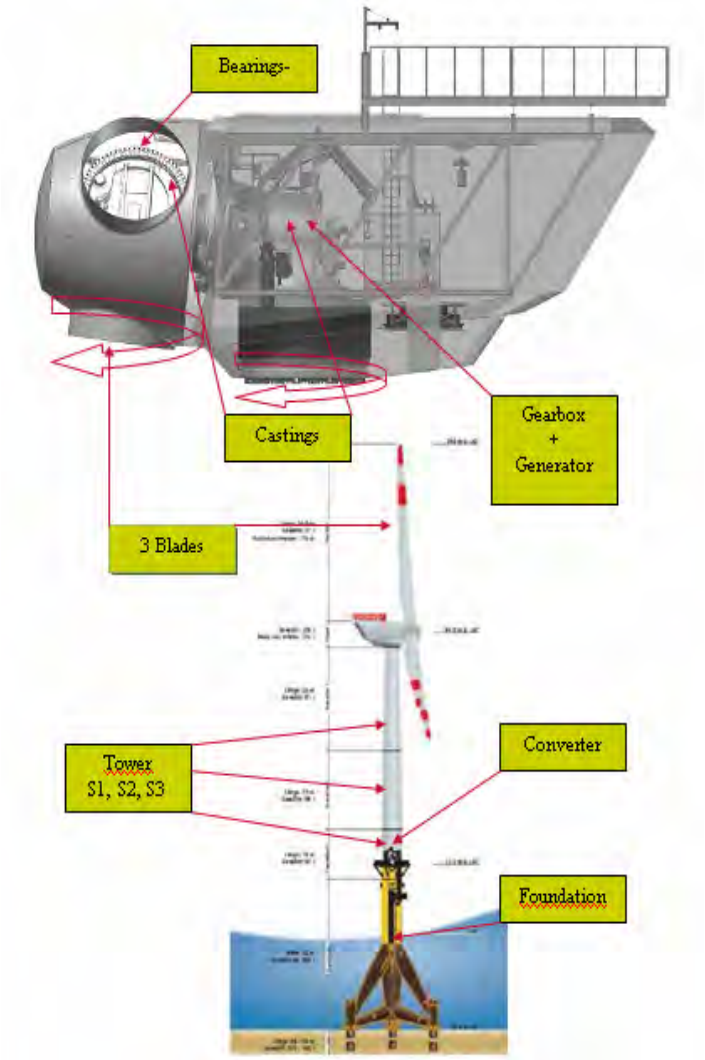
AREVA's Commitment to Domestic Job Creation

- Castings
- Tower
- Blades
- Gearbox



Direct Job Creation	
Assembly	500
Castings	360
Tower	500
Blades	520
Gearbox	330
Bearings	230
Converter / Generator	480
Total	3,750

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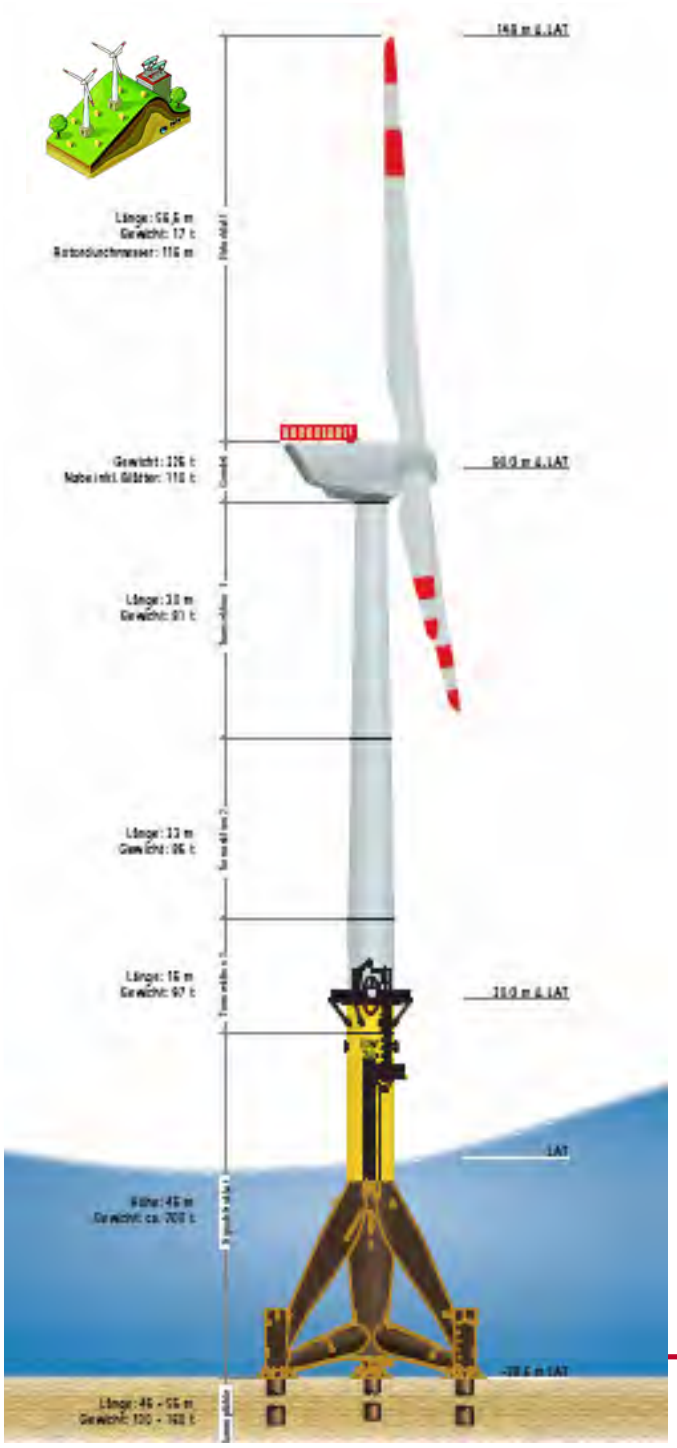

M5000 Main Data

- Hub height: OS 130 m, 102 m - OS 90 m
- Focus offshore-operation
- Reliability
- Weight
- Design according to TK I, GL-Offshore
- Hybrid solution direct Drive/Conventional
- 1 stage gear box
- Medium speed generator
- Maximum integration of drive train
- High component stiffness
- No wear intensive components
- Low speed levels
- Smallest possible number of bearings
- Redundancy of subsystems and sensors
- Condition monitoring of drive train and main subsystems
- Maintenance rate ≥ 1 year

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Alpha Ventus Wind Park

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Clean Energy Park

Energy Concept for a CO2 Free Future?

- **A self-sustaining Clean Energy Park is a partnership that creates value for all stakeholders**
  - **Creates thousands of clean energy jobs**
  - **Creates tax base**
  - **Produces safe, cost effective, CO_2-free energy**

- **Elements of a Clean Energy Park**
  - **An AREVA U.S. EPR™ Reactor**
  - **Renewable Energy**
    - Solar plant
    - Biomass plant

Local job creation, manufacturing, tax revenue

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Synergies Between Nuclear and Renewable

- **Business Synergies**
  - Established relationship with numerous utilities in many countries
  - One-stop-shop for complementary CO2-free energy generation solutions
  - AREVA brand as global leader
- **Technical Know-how and R&D Capacity**
  - EPC and project management
  - Thermal transfer and steam management
  - Corrosion, welding and nanotechnologies
- **Financial guarantees**
  - AREVA financial strength
  - Innovative project financing solutions (co-financing…)

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