



Workshop National Geothermal Capacity Building Programme Indonesia

14 june 2013, Jakarta

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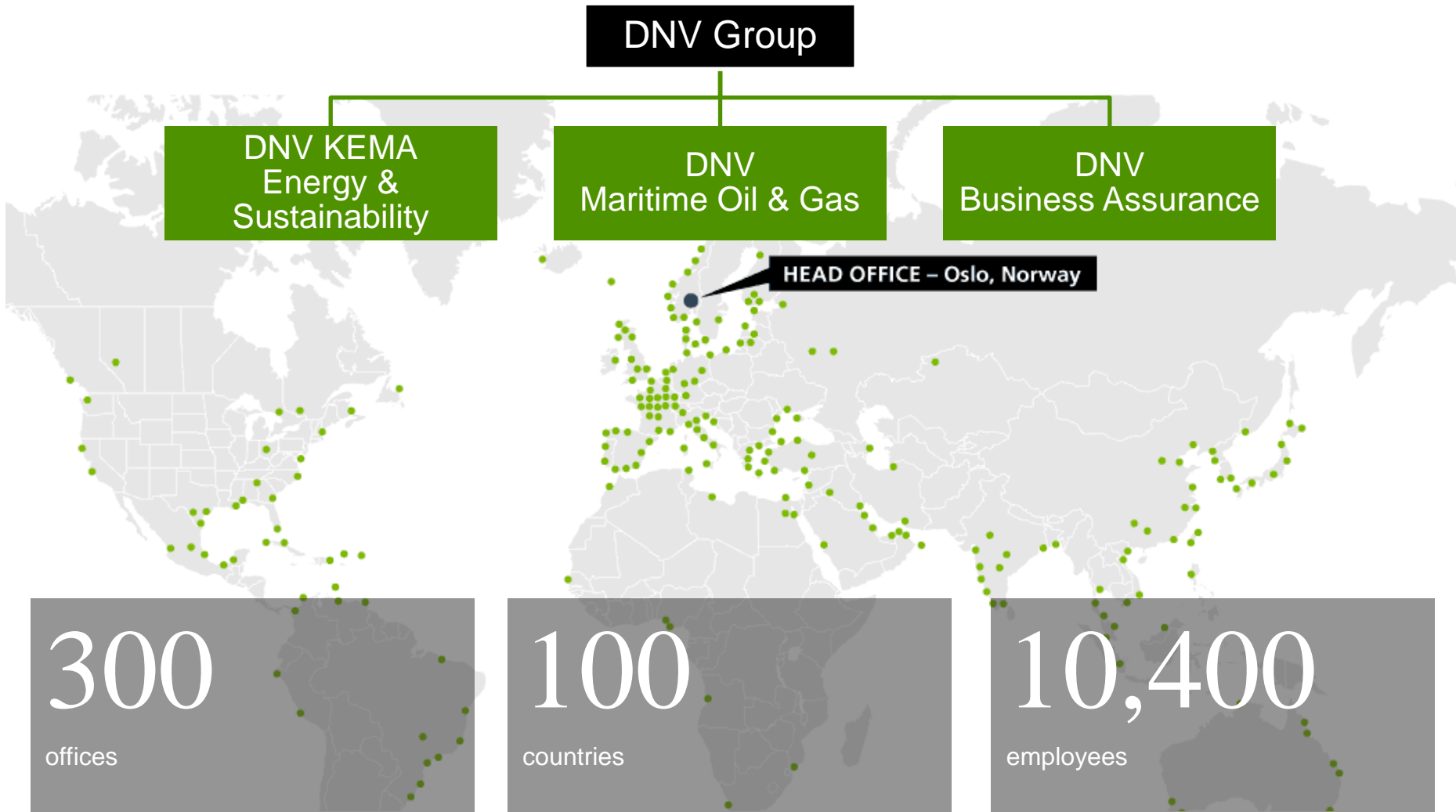


DNV KEMA Energy & Sustainability



- DNV KEMA Energy & Sustainability offers innovative solutions to customers across the energy value chain, ensuring reliable, efficient and sustainable energy supply, for now and the future.
- Over 10,400 experts across all continents
- KEMA and DNV combined: a heritage of nearly 150 years

The DNV Group



DNV KEMA Energy & Sustainability

Serving the needs of the energy market place



Policy &
Strategy



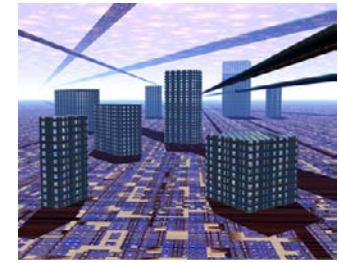
Production



Trading



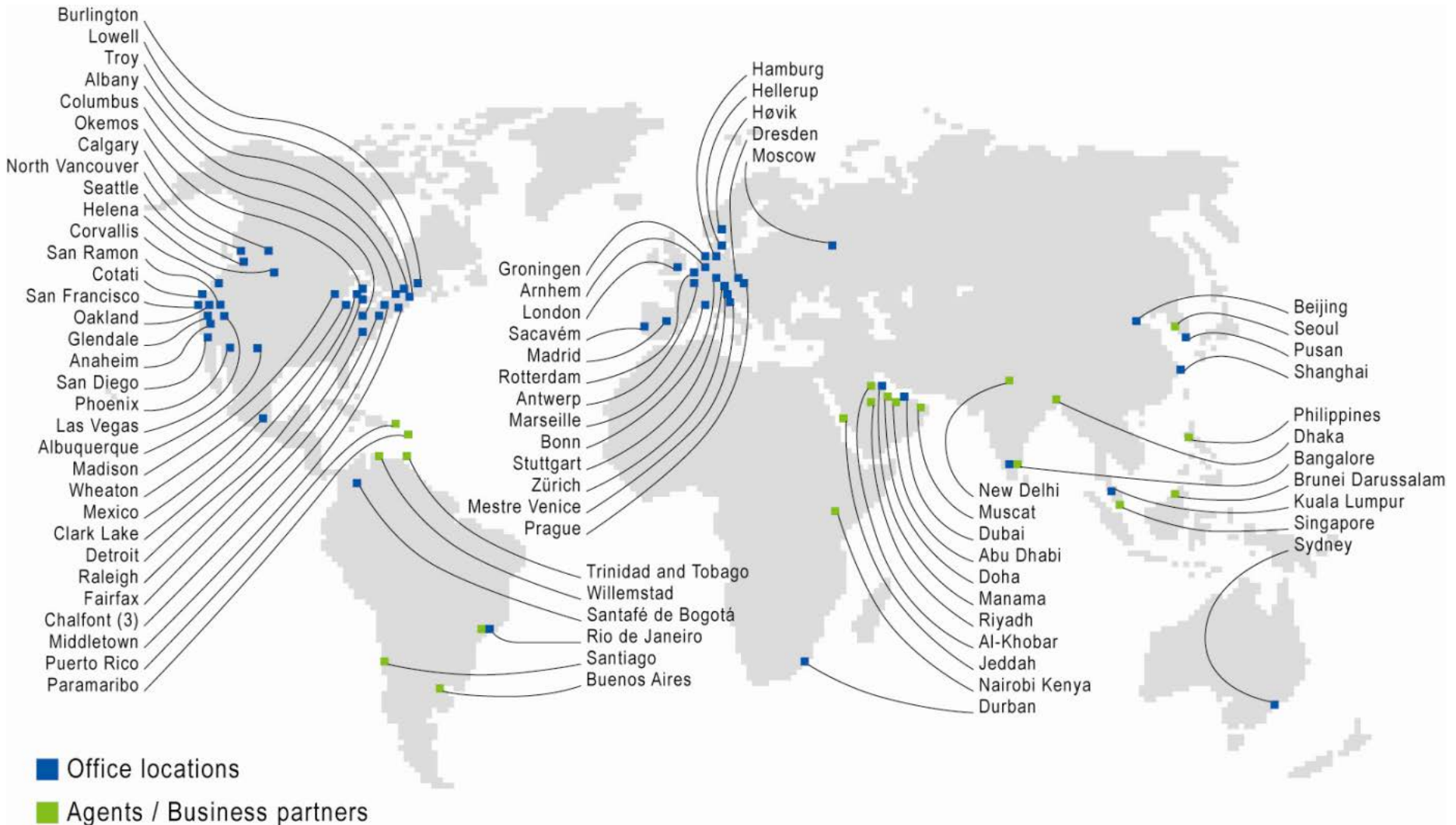
Transport &
Distribution



Use

- Business and technical consultancy, expert advice, operational services
- Testing, inspections, certification, verification
- Risk, performance and quality management
- Research & innovation

Global Presence DNV KEMA



Customers in more than 100 countries



- Energy project developers
- Energy equipment manufacturers
- Power plants
- Energy intensive users
- Energy supply industry
- Transmission & distribution companies
- Transportation and public safety agencies
- Governmental institutions
- Non-governmental organizations
- Financial institutions and banks
- Authorities and regulators
- Agriculture, forestry, waste handling, mining industry, paper industry, district heating

Project with Utility company in Europe

Consulting
Services
Business &
Technical

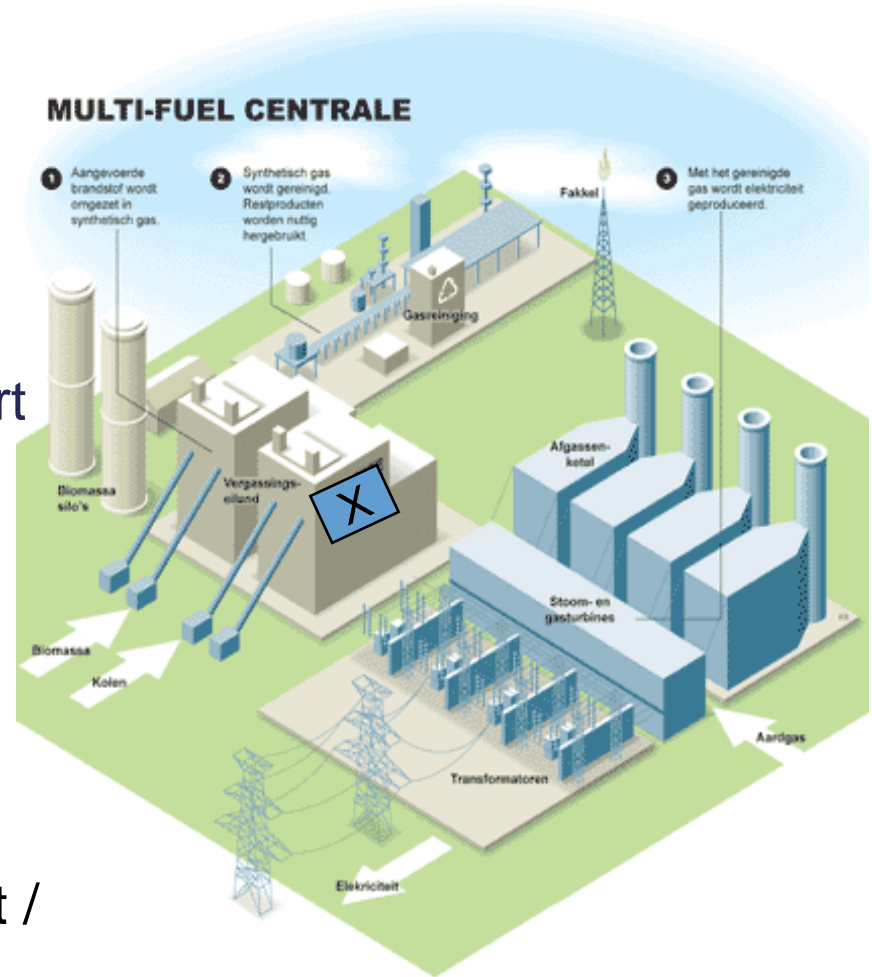
Technical
&
Operation
I Services
Measurements
& Inspections

High &
Medium
Voltage
Testing &
Certification

Products &
Processes
Testing &
Certification

Development of a 1,200 MW
multi fuel power plant

- Project management support
 - CCGT-installation
 - Electrical installation
- Invitation to Tender doc's
- Process calculations
- Environmental issues
- Dynamic simulation model
- Overall witnessing of project / development
- Performance of tests



High Power Laboratories, Arnhem, Chalfont, Prague, Beijing

Consulting
Services
Business &
Technical

Technical
&
Operational
Services
Measurements
& Inspections

High &
Medium
Voltage
Testing &
Certification

Products &
Processes
Testing &
Certification

Issues Type Test Certificates and Test Reports for tests on:

- Cables
- Cable accessories
- Insulators
- Power transformers
- Instrument transformers
- GIS
- Switchgear
- Panels
- New: HVDC.



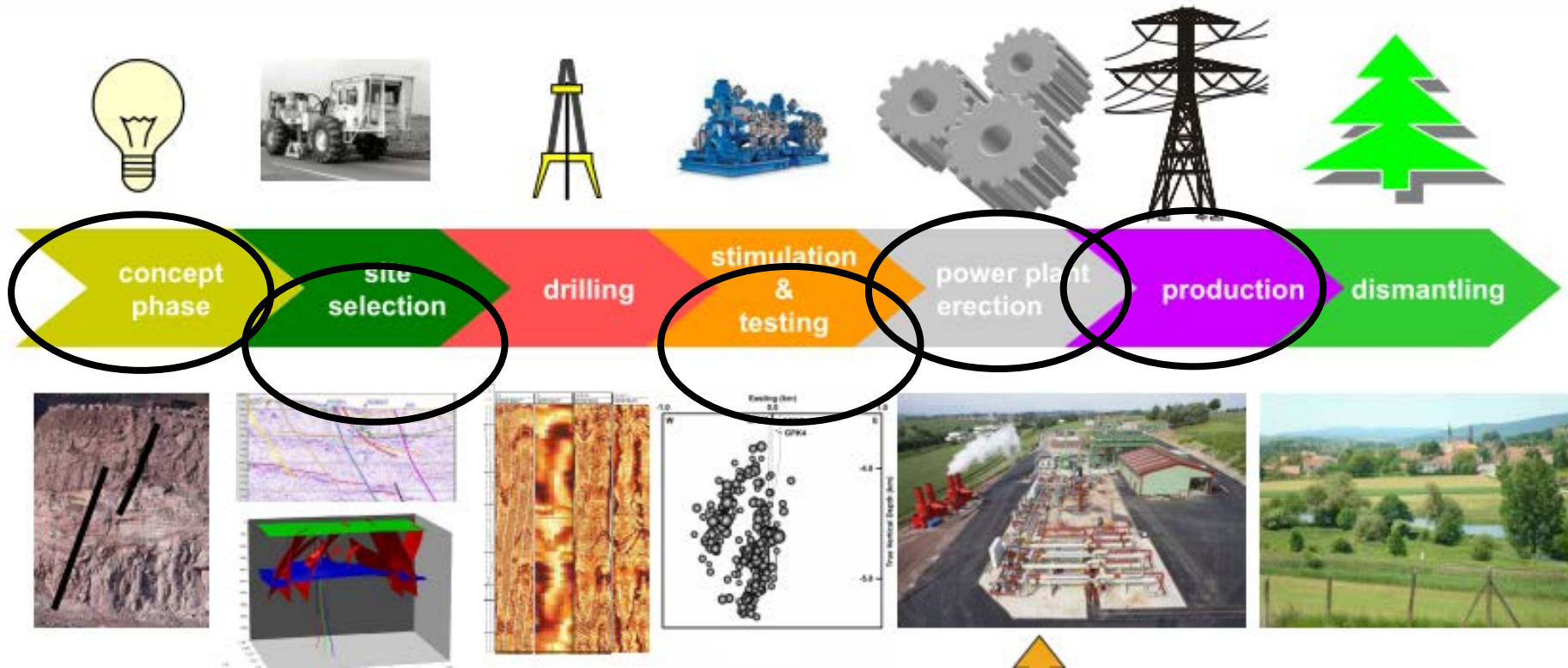
Some More Detail

Operational Excellence



- Strategy, organisation & process consulting
- Risk management
- (IT advisory)
- Global supply chain management
- Trading, retail and market processes
- Meter-to-bill-operations
- Smart grid processes
- Mergers & acquisitions support
- Efficiency analysis & benchmarking
- Managing assets for reliability

Geothermal project lifecycle



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