



INNOVATION
NORWAY



WELCOME TO INNOVATION NORWAY'S SEMINAR ON ENERGY EFFICIENCY AND RENEWABLE ENERGY

Program

09.00-09.10	Opening and Welcome by Ms Liv Monica Stubholt, Norwegian State Secretary of Petroleum and Energy
09.10-09.25	Energy and Environment Sector – What contributions can Innovation Norway and NEEC provide?
09.25-09.50	A China-Norway cooperation model for achieving better energy efficiency
09.50 10.10	Building an environment-friendly society through innovation; challenges and choices
10.10-10.20	The rise of the Green Dragon: The Chinese clean-tech market as a driver for profit and global sustainable development
10.20-10.40	Recent Examples of DNV Energy China's Activities on Energy Efficiency and Climate Change
10.40-11.00	Aqualyng – Energy efficient desalination solutions for production of potable water
11.00-11.15	<i>COFFEE BREAK, 15 minutes</i>
11.15-11.30	Waste - from problem to a resource
11.30-11.45	Metalkraft Presentation
11.45-12.00	NBT – Wind- and biomass energy projects in China





ENERGY AND ENVIRONMENT SECTOR

What contributions can Innovation Norway
and NEEC provide?

Terje Lang-Ree, Regional Director North East Asia
Grethe Bergsland, Project Manager
Geir Haugum, Deputy Director Beijing

Innovation Norway
Commercial Section, Royal Norwegian Embassy

❖ Agenda:

- Newly Appointed Commercial Counsellor, Mr Terje Lang-Ree
- Innovation Norway
- The Norwegian Energy and Environment Consortium – *NEEC*
- Energy Management Program in China, phase II
- China International Environmental Protection Exhibition and Conference – CIEPEC June 2009

❖ New Commercial Counsellor

Terje Lang-Ree

- Norwegian School of Management (BI)
- Innovation Norway Regional Office in Norway,
Director - 10 years
- Car distribution - 8 years
- Banking sector - 2 years
- General Motors, regional dealer - 12 years

❖ Vision

"We give local ideas
global opportunities"



Innovation Norway

750 employees

35 offices abroad – close to market

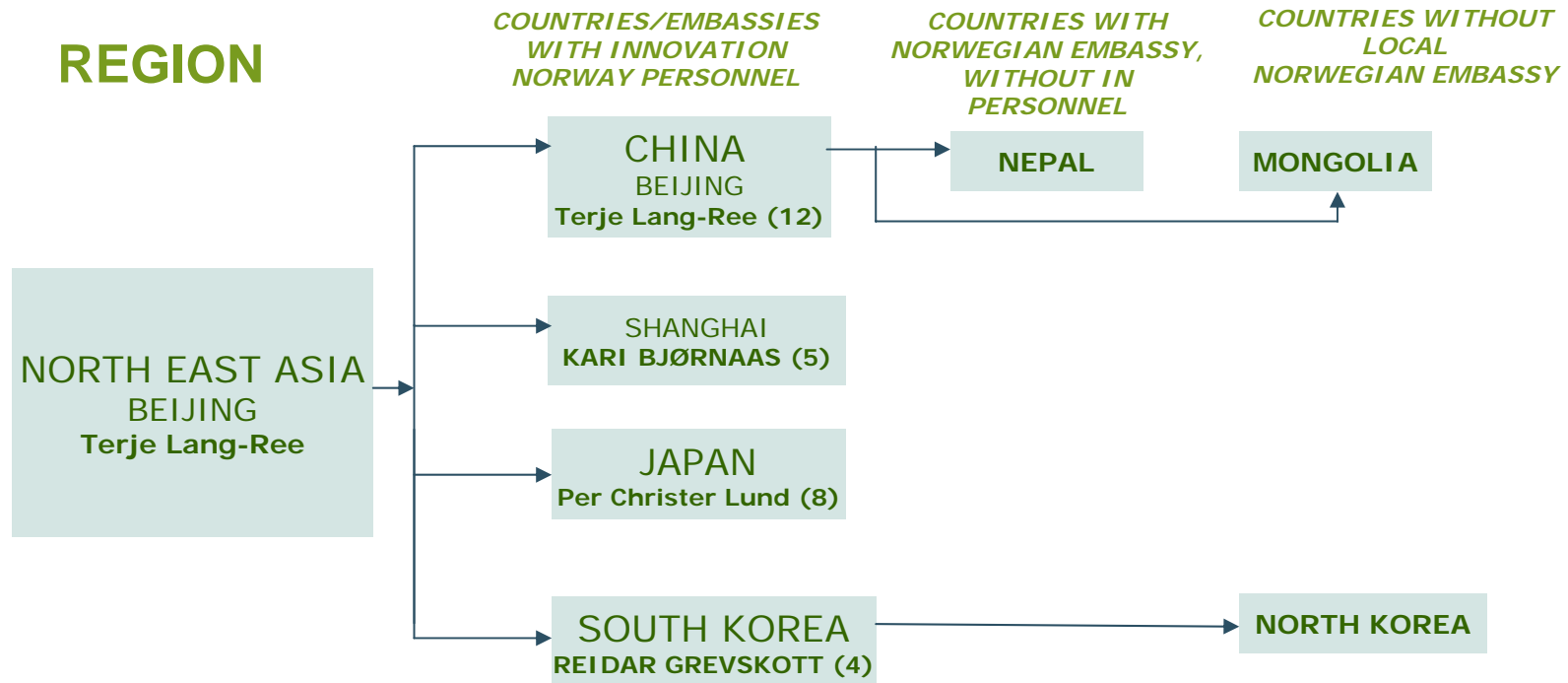
17 regional offices in Norway – close to customer

Financial frameworks in Norway

- Loans – NOK 3 bill. (high risk/low risk)
- Grants – NOK 1,5 bill.
- Tax reduction - NOK 1-2 bill. (operated on behalf of NRC)



Innovasjon Norway, North East Asia (NEA) and China



❖ Innovation Norway China – Focus areas

IN Beijing:

- Energy- and environmental technologies (www.neec.no)
- Marine sector
- Technology sector (ICT niches)
- Health sector
- R&D (Research agreements, NRC)
- Oil & gas (INTSOK/IN.)
- International financing
- SME support-but also locomotives
- Government relations

IN Shanghai:

- Maritime sector
- Oil & Gas sector
- Tourism
- Entrepreneurship - The Norwegian Gründerschool
- SME's
- Government relations

Innovation Norway Services



Project development and facilitation

Market scans

Markets analysis

Partner searches

Partner meetings

Due diligence

Identify relevant consultants

Workshops

Study tours

Conferences

Networks and Matchmaking

Any other needs.....







NEEC – Background

挪威能源与环境联合会-背景介绍

NEEC was initiated in mid - 2005 by the Commercial Section of the Norwegian Embassy in Beijing – ***Innovation Norway***- and members of the Norwegian business community in China with Elkem as one of the key contributors

2005年年中，由挪威王国驻华大使馆商务处（又名挪威创新署）协同挪威在华相关机构、企业共同发起。

NEEC'S aim 目标

To promote Norwegian energy and environment technology in China and further Norway-China cooperation in this field .

推广挪威能源与环境领域的成熟技术与经验。

Contribute to the development of new technologies in collaboration with Chinese clients, and adapted to the current environmental and energy challenges in China

与中国伙伴合作开发适用于中国的环境与能源领域的新技术。

NEEC does not seek to abolish sound competition, but to create a competitive edge for the Norwegian energy and environmental industries in the global marketplace through collaboration.

NEEC has more than 30 members and contributing partners 成员与合作伙伴



GreenStream Network

Entech

Green City Norway



Cooperation partners and contributors:



NEEC's focus areas 重点领域:

- Energy Efficiency and Management in Industry and Buildings
工业与建筑的能源效率与管理
- Water and Waste Water Treatment Technology
水与废水处理技术
- Renewables
可再生能源
- Financing
融资
- And more
其它

What information and services does NEEC offer 提供的信息与服务:

1. Information and promotion of project opportunities in China
提供项目与机会信息，并帮助进行项目推广
2. Regular neec activities including seminars, workshops, networking events, newsletters, reports and more
定期的活动有：研讨会、专题讨论会、业务通讯、报告等
3. Industry and company news 工业与企业信息
4. Financing possibilities 融资可能
5. Chinese contact points 中方联络指导

Why Energy Management in China

为什么要在中国进行能源管理

- 10 % economic growth per year 年经济增长率10%
- 15 % increase in energy use pr. year 年能源使用增长率15%
- 80 % of power production coal based 以煤为原料的能源产品占80%

This accounts for both serious health and environmental constraints.

以上形成严重的健康与环境制约。

- Ambitious Goal for 2020 – China aims to double its energy use, while quadrupling GDP.
到2020年中国计划能源使用率翻一番，同时GDP增长4倍。
- Total energy cost for China's final user 13% of GDP (USA 7%)
能源总支出占中国GDP的13%。（美国是7%）
- Norway and China signed MOU on Energy Efficiency Sept. 2006
2006年9月挪中签订能源效率备忘录

Economic issue as well as an environmental issue-

The real driving force in China for energy saving is reducing costs!

是有关于经济与环境的大事-中国节约能源的真正解决之道是减少支出！

Energy Management Program – 1

能源管理计划 – 1

Initiative taken in parallel by NHO and Innovation Norway

由NHO和挪威创新署共同发起

- Project-owner; NHO, Confederation of Norwegian Enterprise

项目人：NHO

- Partner in China; CEC, China Enterprise Confederation

中方伙伴：CEC，中国企业联合会

- Project coordinator and facilitator in China; **NEEC**

项目在中国的协调人和办帮助人：**NEEC**

- Project deliverables by Norwegian task force

项目由挪威的相关的任务执行机构或企业执行

Energy Management Program – 1

能源管理计划 – 1

Main aim of the program to improve energy efficiency levels in Chinese industry; 项目的主要目标是提高中国工业能源效率水平

- both in relation to production processes and building standards, 兼顾生产过程和建筑标准
- by facilitating the transfer of Norwegian know-how, technologies and competences.
帮助挪威的专有技能、技术及能力的转移

•The program is based on, and part of the focused efforts by the Norwegian and Chinese government, and the longstanding relationship between NHO and CEC
项目是基于挪中两国政府重点关注的领域和NHO与CEC之间的长期交往关系

Energy Management Program 1 – some examples of activities:

Seminar on Energy Management and Efficiency, Climate Challenges and Related Technologies – Beijing, 2007.

2007年在北京举办“能源管理与效率、气候挑战及相关技术”研讨会

- 250 participants. Attended by **Prime Minister of Norway, Mr Jens Stoltenberg.**

与会者共250人，挪威首相到会。

- 140 participants from the Chinese processing, steel/aluminium, paper industry and more

其中中方代表140人，来自加工、铁/铝、造纸等行业



Energy Management Program 1 – some examples of activities:

Energy Management Program Industry Study Tour in Norway 2007

2007年组织能源管理项目工业学习团赴挪威考察



Energy Management Program 1 – key results :

- Six projects identified and developed to PIN stage in the CDM process, whereof five were a direct consequence of the Energy Management Program, and the sixth by the NEEC member GreenStream Network

ENERGY MANAGEMENT PROGRAM 2007 - ENERGY EFFICIENCY & CDM PROJECTS IN CHINA					
No	Project owner / CDM partner	Type of project	Project development status	Saved t CO2 per year	CERs 2008 - 2012
1	ERDOS Phase 1	Heat recovery in the ferro alloy industry	PIN submitted in October. Co-operation discussed in November and ongoing	440 000	1 320 000
2	ERDOS Phase 2	Heat recovery in the ferro alloy industry	PIN submitted in October. Co-operation discussed in November and ongoing	350 000	1 050 000
3	Sinosteel Jilin Ferroalloys	Heat recovery in the ferro alloy industry	PIN prepared in Dec 07 after discussion of co-operation in Nov 07	90 000	270 000
4	Sinosteel Liaoyang Ferroalloys	Heat recovery in the ferro alloy industry	PIN prepared in Dec 07 after discussion of co-operation in Nov 07	26 000	78 000
5	Sanhe Green Hong Kong Ltd.	Straw Fired CHP 50 MW	Building permit granted in Sept 2007, Constr from April 2008 to autumn 2009	322 000	1 046 500
6	Qingdao Heat & Power Corp. Ltd.	Straw Fired CHP 24 MW	Building permit in 1 Q 08, Constr from April 2008	154 560	618 240
	TOTAL			1 382 560	4 382 740

TO SUM UP:

- **Through its members and network NEEC covers a broad area of Norway's energy and environment value chain – from R&D to integrated solutions** 成员广泛，业务涵盖从科研到提供集成解决方案
- **NEEC allows for fast and focused interactions and access to relevant parties** 沟通快捷有效
- **NEEC has strong political backing in Norway** 政治背景强硬
- **Proximity to the market – the NEEC team is located at the Norwegian Embassy in Beijing, and have allocated resources in Shanghai, Tokyo and Seoul** 在北京、上海、东京、首尔均有办事机构





Energy Management Program in China - Phase 2

- **Funded by Norad and Innovation Norway for the period 2009-2011**
- The proposed program includes the following main elements:
 - Continue energy management seminars and capacity building measures as in Phase 1...
 - 继续第一阶段的能源管理研讨会和能力构建措施
 - Facilitate further development of a selection of projects to a stage where the company is equipped with the resources and technical know-how to continue the energy efficiency measures and conclude successfully, either through the use of CDM or through other financial means.
 - 帮助一些项目、公司处于已经具备一定的资源和专有技能继续发展并获得项目最终成功也可以通过使用CDM或其他的金融工具。
 - Where beneficial, to apply Norwegian technology and know-how with the goal of training, developing and implementing the energy efficiency measures in the most cost effective manner.
 - 通过应用挪威的技术和专有技能，还可在培训、成本最优化的方式发展和执行能源效率措施等方面获益。
 - Companies or organizations interested to learn more about the program are welcome to contact with the neec team
 - 欢迎有兴趣了解更多有关该计划的公司和机构与NEEC联系



A Norwegian Pavillion at CIEPEC

'Norway - Powered By Nature'

Innovation Norway/NEEC sponsored event

Date: 3-6 June, 2009

Venue:

China International Exhibition Center, 6 East Beisanhuan Road,
Chaoyang District, Beijing

China Sponsors: Ministry of Environmental Protection, PRC
National Development and Reform Commission
Ministry of Science and Technology, PRC
Ministry of Housing and Urban-Rural
Development, PRC
The People's Government of Beijing Municipality

Organizer:

China Association of Environmental Protection Industry

Priorities:



- ◆Water pollution treatment: including municipal wastewater treatment and reuse, industrial wastewater treatment, drinking water security, water pollution control.
- ◆New energy, renewable energy and energy-saving technologies: including solar, wind, geothermal, hydropower, biomass, energy-saving products, technologies and services.
- ◆Air pollution treatment: including coal-fired plants desulphurization, industrial waste gas treatment, vehicle emission prevention, greenhouse gas reduction, etc;
- ◆Solid waste treatment and disposal: including municipal, hazardous and medical solid waste treatment, disposal, recycling and reuse etc;
- ◆Capacity building of environmental supervision and management: air quality monitoring, water quality monitoring, radiation monitoring, key pollution sources monitoring, environmental emergency and routine monitoring, etc;
- ◆Rural pollution treatment and ecology protection: including soil contamination survey and restoration, natural ecology protection;

Exhibitors 2007

Country Pavillions:

Israeli Pavilion
Italian Pavilion
Japanese Pavilion
Korean Pavilion
Spanish Pavilion
USA Pavilion
Canadian Pavilion
Cleantech Finland Pavilion
French Pavilion
German Pavilion
Hongkong Pavilion
Eco Expo Pavilion

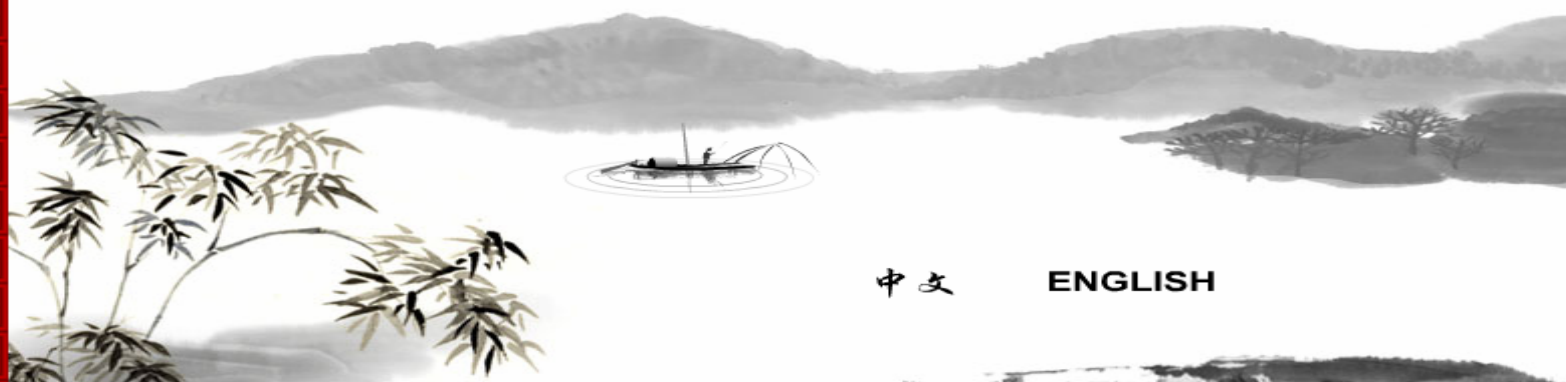
Individual exhibitors from the following countries:

China
Australia
Austria
Czech Republic
Mexico
Hungary
Indonesia
Singapore
Switzerland
United Kingdom



第十一届中国国际环保展览暨会议

The 11th China International Environmental Protection Exhibition and Conference (CIEPEC2009)



中文

ENGLISH

主 办：中华人民共和国环境保护部
承 办：中国环境保护产业协会
Sponsor : Ministry of Environmental Protection, P.R.C.

Organizer : China Association of Environmental Protection Industry (CAEPI)

时 间：2009年6月3-6日

地 点：中国国际展览中心

Date : June 3-6, 2009

Venue : China International Exhibition Center, Beijing



Contact details

For information regarding any of these projects, or should you have further questions, please contact:

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All presentations from this seminar will be available on the NEEC website within next week.

www.neec.no