Elpanneteknik Sweden AB
On the Path for Sustainability
Core Business

Electrical Boilers and Electrical Heating Systems
## Boilers

### High Voltage

**Electrode Boilers**
- ...1 MW up to **70 MW**
- ...6 kV up to 14 kV supply voltage

### Low Voltage

**Element Boilers**
- ...18 kW up to **6000 kW**
- ...400 up to 690V
Scope

- Boilers and Control Equipment
- System Equipment
- System Design
- Turn Key Installation
- Service and Spareparts
Applications

For the purpose of:

- Nuclear Power Plants
- Industrial Plants
- District Heating Plants
- Offshore Rigs
- Marine Applications
- Windfarms
- and other…. 
Irrespective of how electricity is produced, we have the appropriate Electrical Boiler Solution!
When burning of Coal, Wood and Oil for heating continues to pollute the air…..

…. we take joy and pride in assisting to bring Greener Technology in place.
"Around 18,000 people die each day as a result of air pollution"

"In fact, the number of deaths attributed to air pollution each year – 6.5 million deaths – is, according to the World Health Organization (WHO), much greater than the number from HIV/AIDS, tuberculosis and road injuries combined"

"Air pollution also brings major costs to the economy and damage to the environment"

"Energy production and use is the most important source of air pollution coming from human activity"
Air Pollution in China

- "Around 1 million premature deaths today can be attributed to outdoor pollution and household air pollution accounts for a further 1.2 million premature deaths"
- "Life expectancy in China is reduced by almost 25 months because of poor air quality"
- "The response of the Chinese government has been intense and broad in scope"

International Energy Agency 2016
To much coal...

Figure 7.2: Coal-fired power plants and population density in China, 2015

Source: IEA analysis based on Platts World Electric Power Plants database and CoalSwarm.
Renewables upcoming...

Figure 7.8: Energy demand in buildings and related pollutant emissions by fuel in China in the New Policies Scenario

- Bioenergy
- Fossil fuel
- Electricity and heat
- Other renewables

2013:
- Bioenergy: 150 Mt
- Fossil fuel: 300 Mt
- Electricity and heat: 450 Mt
- Other renewables: 600 Mt

2040:
- Bioenergy: 750 Mt
- Fossil fuel: 300 Mt
- Electricity and heat: 450 Mt
- Other renewables: 600 Mt

SO₂:
- 2015: 1 Mt
- 2040: 2 Mt

NOₓ:
- 2015: 2 Mt
- 2040: 3 Mt

PM₂.₅:
- 2015: 4 Mt
- 2040: 5 Mt

Sources: IEA; IIASA.
Elpanneteknik going to China
Why China?

Some items important to Elpanneteknik:

- Big and increasing market & financing possible
- China in need of and very interested in Green Technology
- Decisions made to reduce the use of Coal
- Decisions made to build new Nuclear Power Plants and Windfarms to generate electricity
- Drivers in place, such as cheaper electricity during night hours
- We already had established business contacts that could be developed
- Europe still do not show same interest in electricity solutions
In 2013 Elpanneteknik made the decision to really go for it.

But we needed to "create" the market!

- Our main customers are Government and Governors, state owned organizations such as Hospitals, University, and others.

- They sometimes do not want to invest a lot of money.

- They were not very familiar with Electric Boiler systems.
Chinese company

Elpanneteknik Shanghai (Group) Co., Ltd.

- Marketing District Heating systems
- Building District Heating Plants
### Key Market: District Heating

#### 1. BOO (Build - Own - Operate)

- **Scope of supply:** Boiler Room; All the equipment in the boiler room, High voltage transformers and cables, etc.

- **Earnings:** 30 years operation and toll collection right; government subsidies

#### 2. BT (Build - Transfer)

- **Scope of Supply:** Boiler Room; All the equipment in the boiler room, High voltage transformers and cables, etc.

- **Earnings:** 30% down-payment, 60% acceptance payment, 10% warranty payment
1. Construction content and scale:
Using High Voltage Electrode Energy-storage Boilers to provide residential heating to six communities through the off-peak electricity at night.

Zhao County Urban-rural Housing Construction Bureau

2. Investment estimation:
43 000 000.00 RMB in total investment.

3. Investment Model:
BOO (Build-Own-Operate)
[Management period is 30 years]

4. Construction Scale:
Construction Area: 287 174 m²
System: 2*12MW ETHH12Mi
7 units accumulator tanks
Other auxiliary equipment
Considerations

Special attention to:

- Financing
- Ownership
- Tax issues
- Law
- Establishment in Free Trade Zone
- Government contacts
- Translations, etc…

You will benefit from close relations with a solid partner in China!
Key Success Factors

! Present
You have to spend a lot of time in China

! Interested
You should learn about Chinese culture, history and social interaction and negotiation patterns

! Alert
Things often move very fast
Networking is crucial

- Establish and maintain relations

- Cooperate with Governmental organizations and NGO’s, such as
  - Swedish Embassy
  - Business Sweden
  - Sweden China Trade Council
  - and others…

- Cooperate with Chinese partner able to establish and maintain relevant relations, able to make correct translations, with knowledge of business and market
Key Success Factors

! Participate in delegations
Marketing in Chinese & English languages:

- Broschures
- PowerPoint
- Videopresentations
- Television
- and other
To be successful in China,
people need to know you already are…

Gothenburg Office

Shanghai Office
Afraid of loosing your technology from Copying?

The risk is real!

But how do you make business if you do not put your product on the market?

- Cooperations Agreements
  - Intellectual Property rights (IP) are increasingly respected

- Cross-holdings in companies
  - Minor holding paid by "Technology Transfer"?

- Develop your relations continously
  - Be present, etc

- Develop your business together
  - Continued earnings is the best driver
Do you have a Green Technology Product?

- The World needs it!
- It is possible!
- Start "Networking"!
Contact us

Sweden Offices:

Gothenburg  Lilla Bommen 1, 41104 Göteborg

Nyköping  Idbäcksvägen 8B, 61138 Nyköping

Jönköping  Sjöåkravägen 28, 56431 Bankeryd

Mårten Björk  +46 760 063 937

marten.bjork@elpanneteknik.com

Staffan Björk  +46 706 404 558