

# Green Solutions for Sustainable Business

Jens Wegmann  
CEO Industry Solutions

May 11, 2010, Germany

Copyright © Siemens AG 2010. All rights reserved.

The dry-type MEROS gas-cleaning process  
removes pollutants far more effectively



Copyright © Siemens AG 2010. All rights reserved.

**The COREX process considerably reduces raw-material costs and environmental emissions**

**SIEMENS**



Page 3

4th Media Summit 2010 – Metals and Mining Technologies

Copyright © Siemens AG 2010. All rights reserved.

Jens Wegmann CEO I IS

**Less energy consumption with ESP also means a major reduction in CO<sub>2</sub> emissions**

**SIEMENS**



Page 4

4th Media Summit 2010 – Metals and Mining Technologies

Copyright © Siemens AG 2010. All rights reserved.

Jens Wegmann CEO I IS

## New Flotation Cell from Siemens leads to higher material yield with lower costs

SIEMENS



Page 5

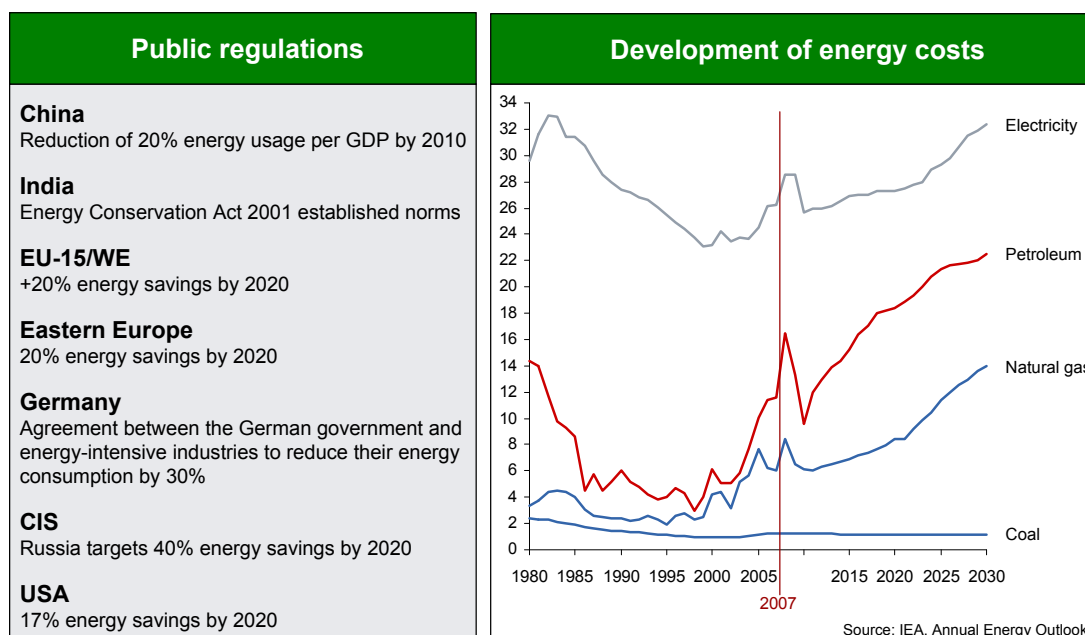
4th Media Summit 2010 – Metals and Mining Technologies

Copyright © Siemens AG 2010. All rights reserved.

Jens Wegmann CEO I IS

## The economical and ecological significance of energy efficiency is increasing

SIEMENS



Copyright © Siemens AG 2010. All rights reserved.

Page 6

4th Media Summit 2010 – Metals and Mining Technologies

Jens Wegmann CEO I IS

Sustainable business requires green solutions for all three main elements of environmental management

SIEMENS

1

Energy Efficiency

2

Pollution Control

3

Water Management

Copyright © Siemens AG 2010. All rights reserved.

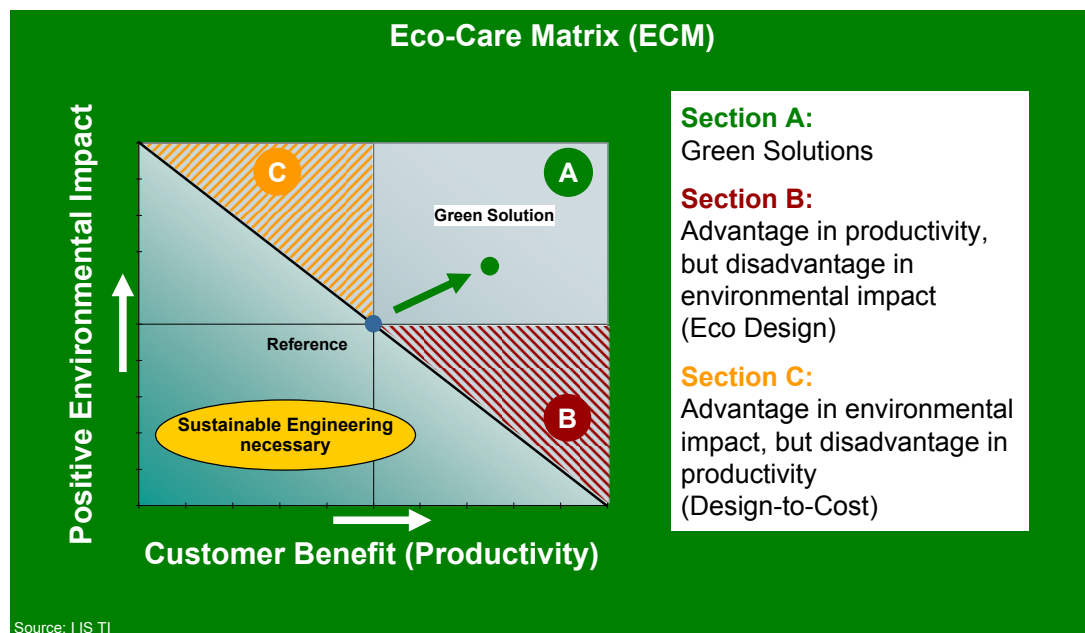
Page 7

4th Media Summit 2010 – Metals and Mining Technologies

Jens Wegmann CEO I IS

The Eco-Care Matrix supports the development of Green Solutions and Sustainable Engineering

SIEMENS



Copyright © Siemens AG 2010. All rights reserved.

Page 8

4th Media Summit 2010 – Metals and Mining Technologies

Jens Wegmann CEO I IS

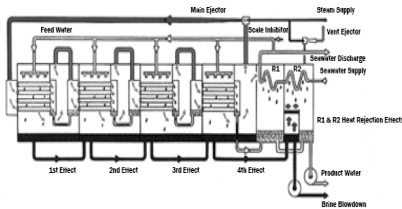
## Optimized Component: Process water produced from sea water

SIEMENS

### Water Industry



Multi-Effect Distillation (MED)



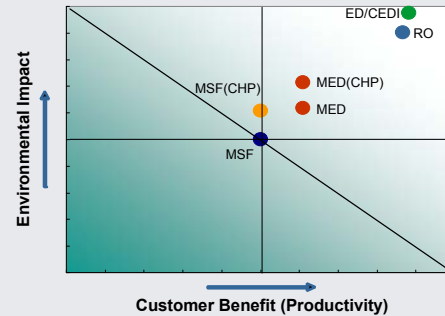
Green Solution

MED:  
Using the waste heat from the steel plant for producing process water from sea water.

ED/CEDI is the most eco-efficient approach to generate process water from sea water (under development).

Environmental Impact

Customer Benefit



Copyright © Siemens AG 2010. All rights reserved.

## Optimized Process Technology: Endless Strip Production (ESP)

SIEMENS

### Steel Industry

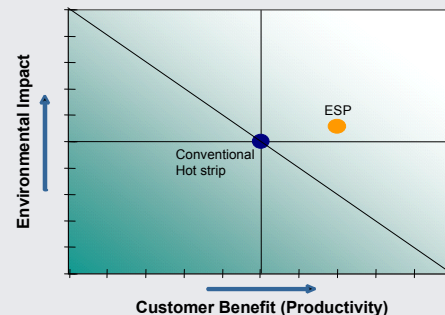


Green Solution

Continuous process provides the opportunity to use the heat from the hot steel for the process instead of waste heat at a batch driven process.

Environmental Impact

Customer Benefit



Copyright © Siemens AG 2010. All rights reserved.

## Optimized Process Technology: COREX/FINEX – hot metal producing technologies

SIEMENS

### Iron & Steel Industry

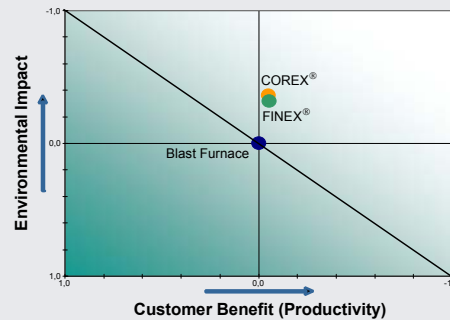


Green Solution

**Corex** is an industrially and commercially proven smelting-reduction process for the cost-efficient and environmentally friendly production of hot metal from iron ore and coal.

**Finex** is an innovative iron making process for the production of hot-metal based on the direct use of iron-ore fines and non-coking coal.

Environmental Impact



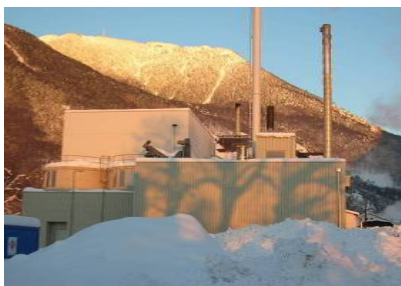
Customer Benefit

Copyright © Siemens AG 2010. All rights reserved.

## Optimized Auxiliary Process: Reject Power – Energy instead of deposition

SIEMENS

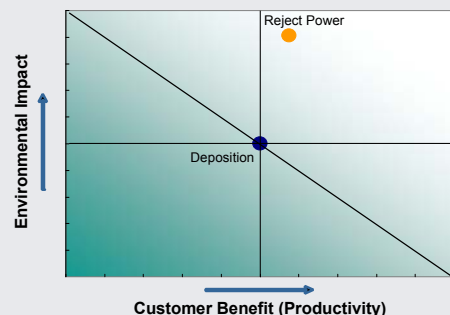
### Pulp & Paper Industry



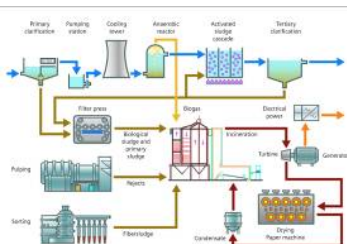
Green Solution

Using the heat of burned paper waste for electrical power and heat generation instead of environmentally critical deposition (example for W2E = Waste-to-Energy)

Environmental Impact



Customer Benefit



Copyright © Siemens AG 2010. All rights reserved.

**Industry Solutions is a leading solution and service provider for selected industrial vertical markets**



**Industry Sector – Industry Solutions Division**

Order intake: €6.1 bn    Revenues: €6.8 bn    Profit: €360 m    Employees: ~31,000

**Metals Technologies**



- Mining
- Iron making and Steel making
- Casting and Rolling
- Processing Lines
- Metallurgical Services

**Water Technologies**



- Water treatment
- Water reuse
- Wastewater treatment
- Dewatering and residuals management

**Industrial Technologies**



- Pulp and Paper
- Cement
- Marine Solutions
- Infrastructure
- Cross Industry

**We create sustainable value for our customers by optimizing plant efficiency and productivity over the entire life cycle.**

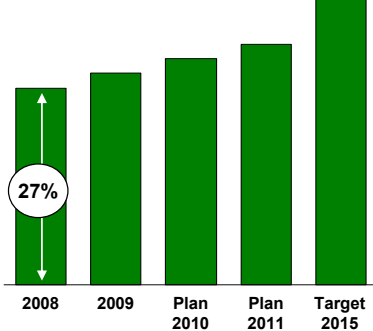
Copyright © Siemens AG 2010. All rights reserved.

**Industry Solutions possesses the know-how and the experience for Green Solutions**



**We exploit the potential for energy & environmental care solutions**

Revenue share of Environmental Portfolio in %



**Industry Solutions has the answers**

- Industry Solutions has detailed process know-how and is therefore able to offer energy efficient and low-emission solutions.
- Solutions from Industry Solutions preserve the environment and at the same time create competitive advantages.
- The local presence in over 50 countries allows Industry Solutions to incorporate local requirements concerning environmental protection.
- Industry Solutions provides standardized and therefore competitive solutions.

**Green Solutions offer a triple win situation – for the customer, the society and the environment.**

Copyright © Siemens AG 2010. All rights reserved.

Thank you for your attention.

**SIEMENS**

Copyright © Siemens AG 2010. All rights reserved.