SUSI PARTNERS
SUSTAINABLE INVESTMENTS

# Institutional interest and cold climate wind

## An Investment Outlook

Presentation to Winterwind 2012 - Skellefteå, 7. February 2012

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Winterwind 2012
INTERNATIONAL WIND ENERGY CONFERENCE

FEBRUARY 7-8
SKELLEFTEÅ, SWEDEN

# Institutional interest and cold climate wind



## Agenda

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- Market Momentum in Renewable Energy
- General Investment Forecast

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- What is the appeal?
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- Securing Continued Advancement

## Summary

# About me



**Otto von Troschke**, MSc. BA (EBS)

Function: Chief Investment Officer

Professional background: Co-Founder SUSI Partners AG

Sectors: Private equity, real estate/infrastructure project finance

Companies: Fortress Investment Group and Morgan Stanley

Track record: renewable energy assets financing (EUR 100m); Acquisitions of commercial real estate (EUR 2 bn), retail assets (EUR 450m); Transaction underwriting (EUR 9bn); disposals of bank branches (EUR 300m); single assets deals (EUR 750m); refinancing 3 loans (EUR 400m), issuance of a convertible bond (EUR 75m)


**Sustainable investments for institutional investors**
*Introduction and overview of technical papers and case studies*
Mirjam Staub-Bisang
NZZ Libro 2011

**World Economic Forum**
Global Shaper 2011

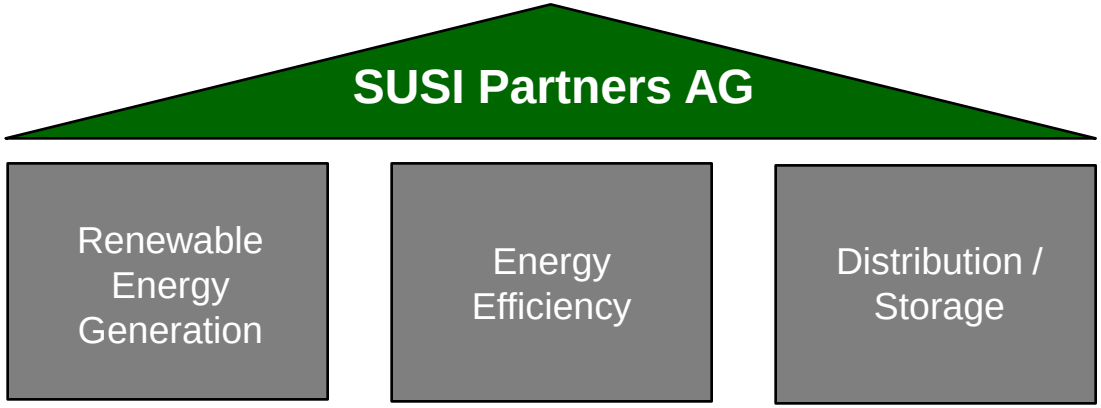
# About SUSI Partners



**SUSI Partners ("SUSI") is a Swiss investment house focusing on infrastructure investments with a measurable sustainable impact. With its daughter company Sustainable SARL in Luxembourg, SUSI is offering funds to institutional investors.**

SUSI focuses on two major and long-lasting trends:

- *Infrastructure*
- *Climate Change*



# Where are we?



## Global Investors

**• Stock Market Variability**

Disappointing earnings reports, missed forecasted, depressed business development, and reduced dividend yields have significantly lower stock pricing

**• Sovereign Debt & Lending**

Depressed business flow and limited tax growth are red flags to rating agencies.

**• Mandate Pressures**

Public and private pensions need to grow their investments 3-5% annually to meet their beneficiary requirements.

## Global Environment

**• Climate Crisis**

Greater global acceptance of human-induced climate change and need for global coordination and investment.

**• Energy Challenges**

Economic concerns have diverted attention from the global energy challenge. Post-Fukushima has affect nuclear policy

There is global investment pressure to invest in dependable assets.

# Energy Infrastructure Interest



## Infrastructure as an Asset Class

realization amongst institutional investors of this allotment misconception; and unsurprisingly, the premiums of infrastructure (especially in sustainable infrastructure like renewable energy) are increasingly being sought after.

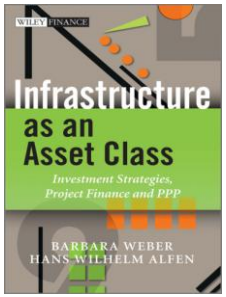
## Energy Appeal

Decoupling of the energy industry, government incentives, society's growing electrification, need for modern infrastructure, and technologic maturity are some of the many appealing characteristics of investing in energy.

## Sustainable Infrastructure Focus

Sustainable infrastructure can be defined as infrastructure that replaces conventional resources and simultaneously delivers comparable economic performance while preserving environmental integrity.

### Theory




Weber, Barbara, and Hans Wilhelm. Alfen. *Infrastructure as an Asset Class: Investment Strategies, Project Finance and PPP.* Chichester, West Sussex, U.K.: Wiley, 2010. Print.

### Practice

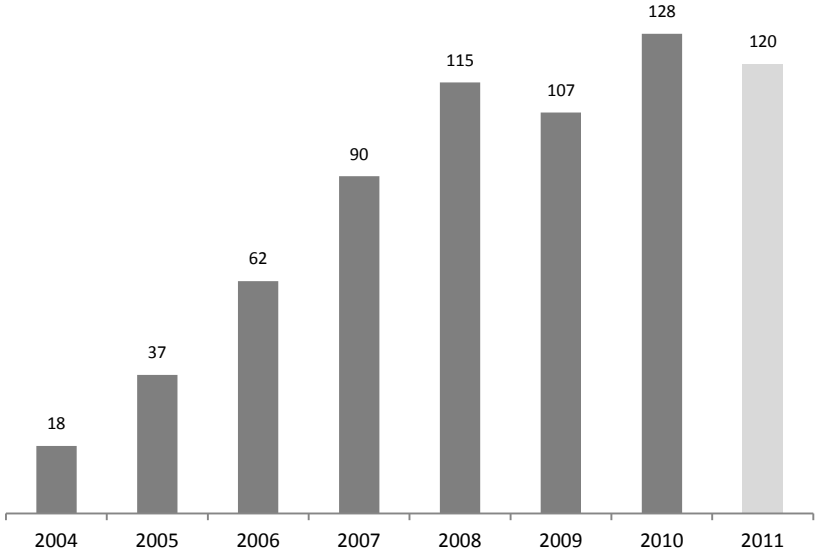
| Fund | Closing Date | Size |
|---|---|---|
| Brookfield Americas Infra (Brookfield) | Sept 2010 | 2.65bn USD |
| BNP Clean Energy (BNP) | Dec 2010 | 437mn EUR |
| Energy Spectrum VI (Energy Spectrum) | Apr 2011 | 999mn USD |
| Cube Infra Fund (Natixis) | Jul 2010 | 1.08bn EUR |
| Global Infra Partners II (Global Infra) | - | 5.00bn USD |
| CVC Euro Infra (CVC Infra) | - | 2.00bn EUR |
| RREEF Pan-Euro Infra (RREEF) | - | 2.00bn EUR |
| Macquarie Euro IV | - | 2.00bn EUR |

Energy infrastructure is attracting billions of euros

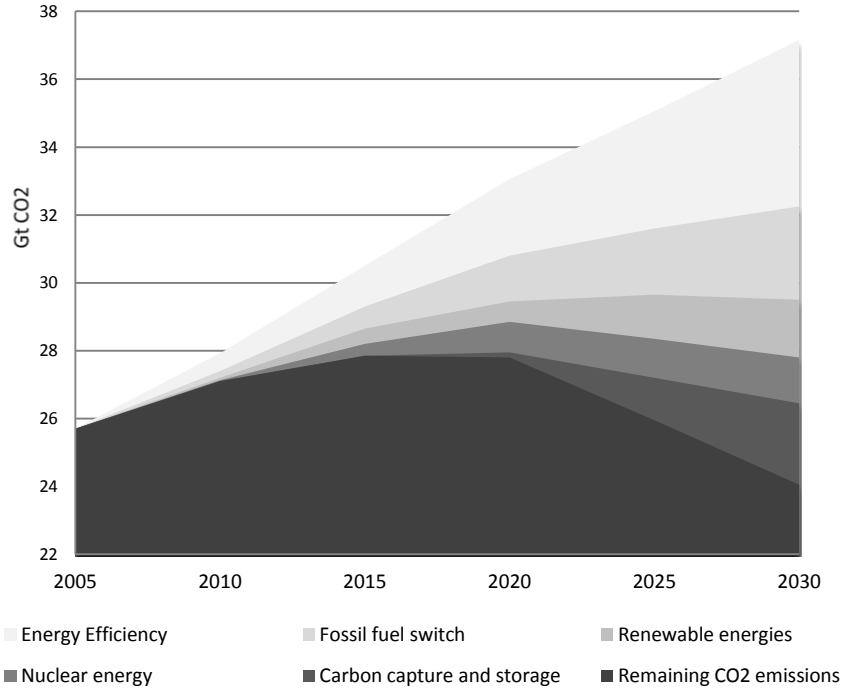
# Market Momentum in Renewable Energy



## Global Asset Financing for Renewable Energy ($bn)[1)]




## Global Potential for Sustainable Infrastructure Improvements[2)]



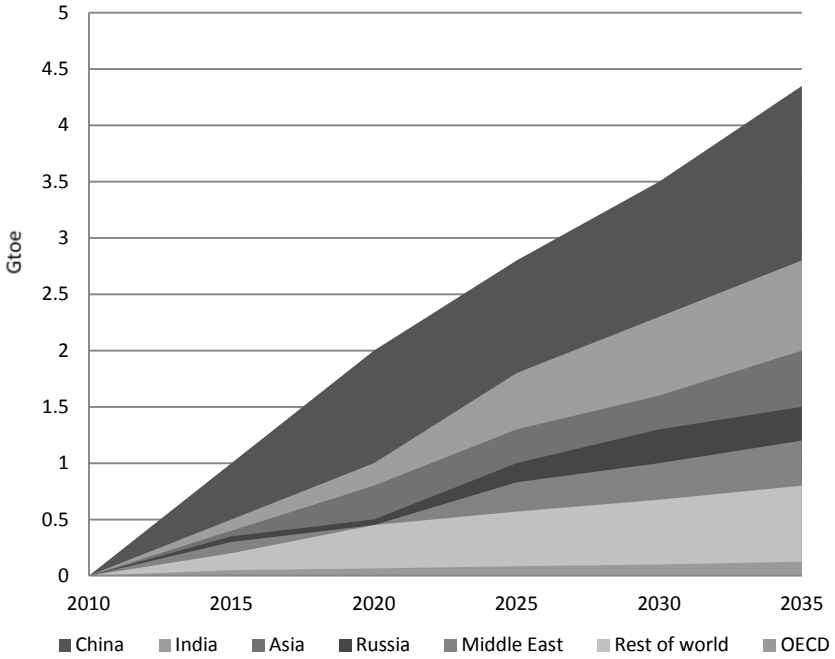

Source: 1) BNEF: Global Trends in Renewable Energy Investment 2011 (2011 tbd)
2) Eco-efficiency: Sources for CO2 abatement

**Sustainable infrastructure will require EUR 1 trillion investment over the next 10 years to meet their 2020 energy goals**

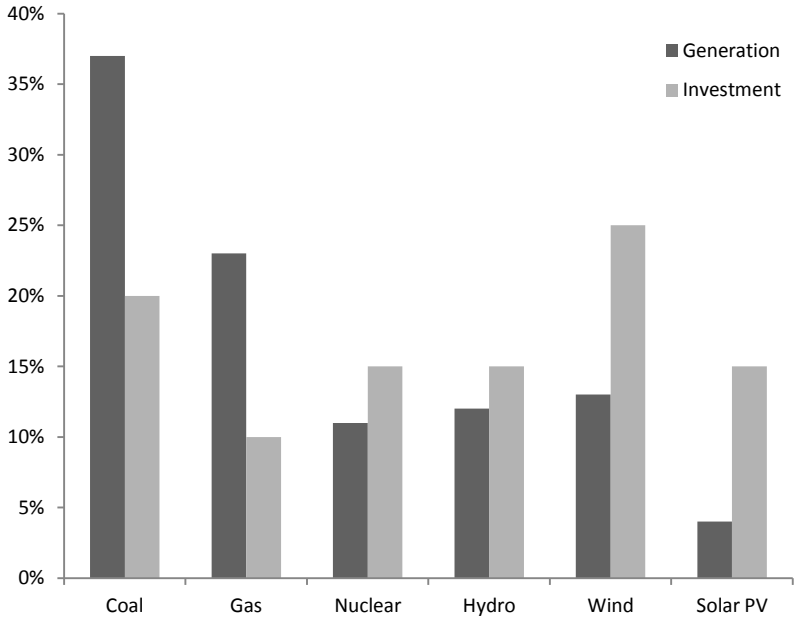
# General Investment Forecast



## Growth in primary energy demand in the New Policies Scenario[1)]




## Share of new power generation and investment, 2011-2035[1)]

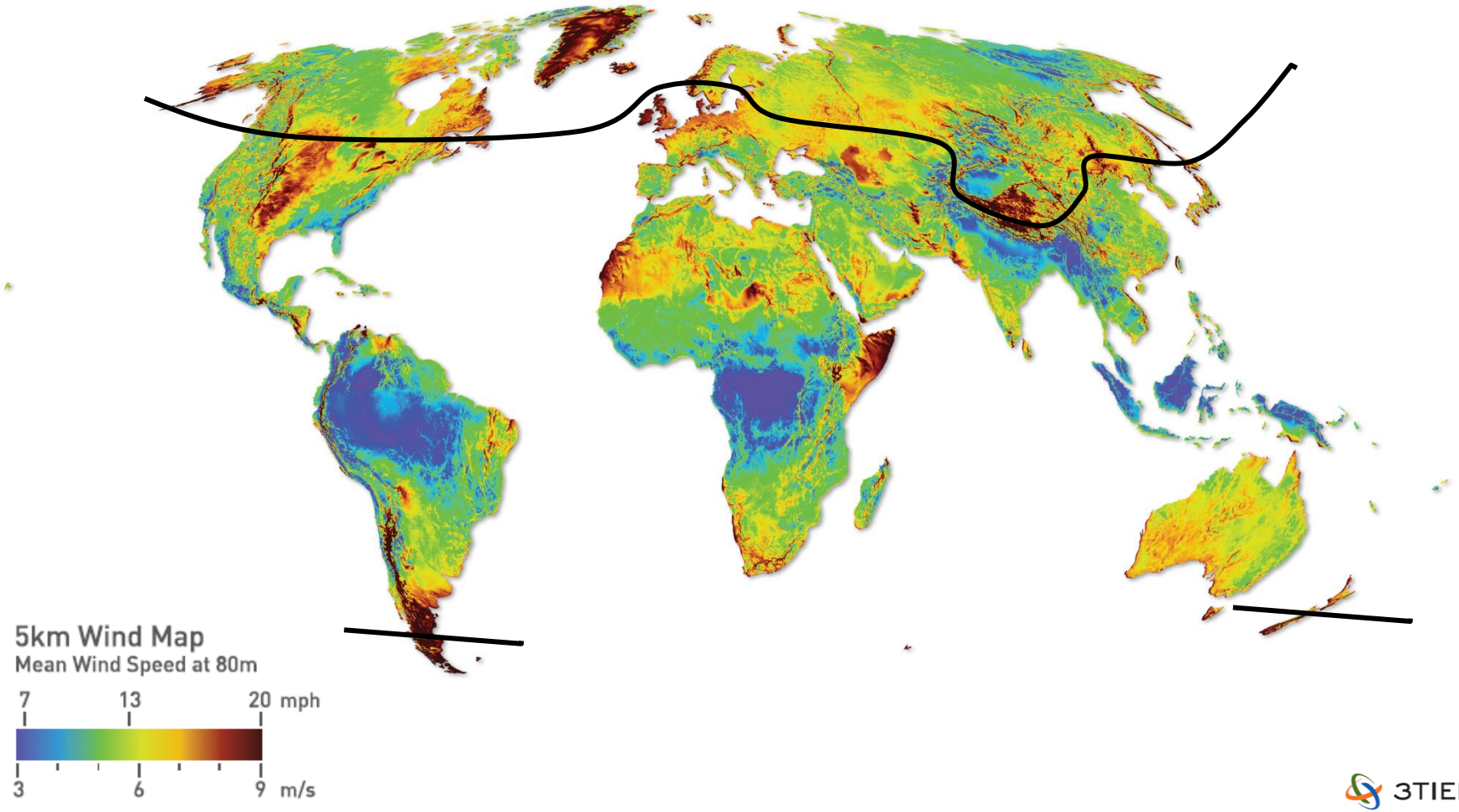



Source: 1) OECD/IEA World Energy Outlook 2011

Renewables are often capital-intensive, representing 60% of investment for 30% of additional generation

# What is the appeal?





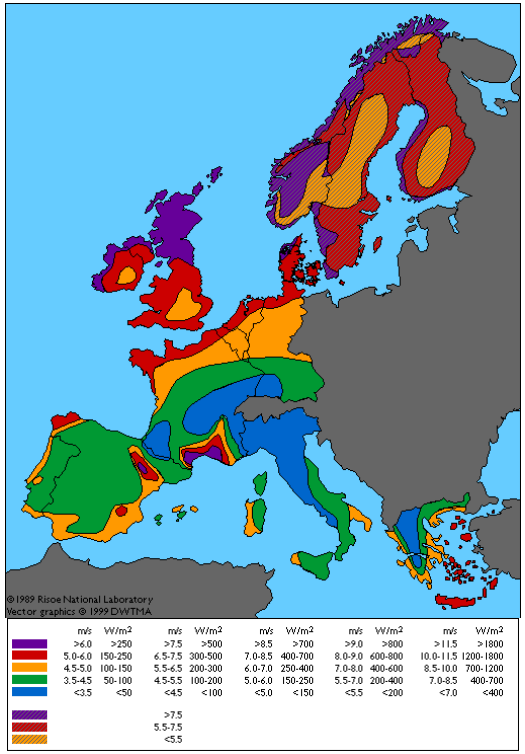

3TIER

Where does terrestrial wind blow?

# Investment Analysis



| Comparables | | | | | | |
|---|---|---|---|---|---|---|
| *Country* | *Installed Wind Capacity 2009 (in MW)* | *Population 2011* | *GDP 2010* | *Currency 2011* | *Electricity Production 2009 (in kWh)* | *Electricity Consumption 2009 (in kWh)* |
| Finland | 146 | 5.2 m | $ 239.2 b | Euro | 67.9 b | 83.09 b |
| Norway | 431 | 4.7 m | $ 255.3 b | Norwegian krone | 129.9 b | 115.6 b |
| Sweden | 1'560 | 9.1 m | $ 354.7 b | Swedish krona | 129.4 b | 132.1 b |
| Denmark | 3'465 | 5.5 m | $ 201.7 b | Danish krone | 34.1 b | 33.4 b |
| Estonia | 142 | 1.2 m | $ 24.70 b | Estonian kroon | 8.8 b | 7.1 b |
| Germany | 25'777 | 81.4 m | $ 2.940 t | Euro | 556.4 b | 544.5 b |




## General Appeal

Much less risk than offshore wind energy. greater air density, leading to higher power capacity and production. Cold climates also protect better against voltage loss.

## In Northern Europe Alone

Good wind conditions, greater land area, sound sovereign management, favorable growth prospects, Recent government backed incentive systems in Norway and Finland

## Global Prospects

The Tundra and Taiga biomes compromise the world's largest terrestrial biomes. Target areas include: Siberia , Canada, Patagonia, New Zealand, Himalayas, Alps.

Source: Risoe National Laboratory 1999

# Securing Continued Advancement



## Clear Government Policies & Grid Updates

- need to provide long-term frameworks
- Feed-in tariffs, green certificates, tax savings, investment grants,
- coordinate and prioritize updates to grid to accommodate wind power integration.

## Unambiguous Development Procedures

- draft clear parameters to easy the development procedure
- allow for quicker development and a more responsive pool of investors.

## Greater Project Competition

- small to medium sized developments are just as investment worthy as large scale projects
- development competition allows for greater distribution of wealth, a more dynamic power market, and a diversification of industry actors.

## Technical Approves , Collaboration and Deployment

- collaboration amongst suppliers and manufacturers is key to evolving cold climate wind energy
- stringent technical stamps of approvals (like TUV, UL, IEC, etc) and reference sites facilitate rapid deployment

**Stable investment regimes and greater collaboration will drive investment.**

# Summary



**Too much cash, little 'safe' investment opportunities**

Institutions are idle on a tremendous amount of cash because volatile stock/debt markets. Energy infrastructure provides an attractive investment space

**Energy demand**

Growing electrification, limited nuclear development, and replacement of grandfathered power plants provides an appealing investment environment.

**Tundra and taiga**

Huge land spaces with excellent wind potential and limited development – these are the regions with the greatest potential for wind development (more so than offshore).

**Working together**

Technology specialists, suppliers and manufacturers need to collaborate for quicker deployment of leading technologies. Policy makers, power authorities and project stakeholders need to provide development clarity to facilitate investment. Grid operations need to prepare for and accommodate wind power integration.

Thank You!

# Contact



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SUSTAINABLE INVESTMENTS

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