

Hanse-Wissenschaftskolleg  
Institute for Advanced Study

# Conference

## “Sustainable Material Life Cycles – Is Wind Energy Really Sustainable?”

Delmenhorst, June 19 – 20, 2012

### Organizers:

**Dr.-Ing. Alexandra Pehlken**

Universität Bremen

**Dipl.-Wirt. Inform. Andreas Solsbach**

Carl von Ossietzky Universität Oldenburg

### Venue:

Hanse-Wissenschaftskolleg  
Institute for Advanced Study

Lehmkuhlenbusch 4

27753 Delmenhorst

Germany

[www.h-w-k.de](http://www.h-w-k.de)

**ForWind**   
Zentrum für Windenergieforschung

Program

## Tuesday, June 19 (Day 1)

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11:00            *Welcome*

### Session: Material Flows and Sustainability

- 11:15 – 11:45    Material Stock and Material Flows of Onshore Wind Turbines in Germany  
(Sören Steger, Wuppertal Institut)
- 11:45 – 12:15    Material Flow of Strategic Resources for the Future Wind Energy in Germany  
(Beatrix Becker, TU Darmstadt)
- 12:15 – 12:45    Sustainability Assessment of Steel Constructions for Offshore Wind Turbines  
(Anne Bechtel, Leibniz Universität Hannover)

12:45 – 14:00    *Lunch Break*

### Session: International Developments

- 14:00 – 14:45    Keynote Lecture  
(Jeetendra Bisht, Suzlon Energy Ltd., India)
- 14:45 – 15:15    Implication of Onshore Wind Energy Development by 2020 in China on Natural Resources  
(Chun Xia, Wuppertal Institut)

15:15 – 15:45    *Coffee Break*

### Session: Life Cycle Approach

- 15:45 – 16:15    Resource Use of Two Offshore Wind Farms in the German North Sea  
(Jens Teubler, Wuppertal Institut)
- 16:15 – 16:45    LCA Tool for Wind Energy Converters  
(Stefan Gößling-Reisemann, Universität Bremen)

16:45 – 17:15 Logistics in Offshore Wind Parks  
(Nils Giese, Universität Oldenburg)

17:30 – 18:30 Poster and Industry Session

18:30 – 22:00 *Dinner Reception*

## **Wednesday, June 20 (Day 2)**

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09:00 *Welcome and Summary of Day 1*  
(Alexandra Pehlken, Universität Bremen)

09:15 – 10:00 Keynote Lecture (NN)

10:00 – 10:30 Logistics and Condition Monitoring of Wind Turbines  
(Christoph Adrian, HAWART, Ganderkesee)

10:30 – 11:00 *Coffee Break*

### Session: Rotor Blade

11:00 – 11:30 Rotor Blade Production - Resource Efficiency through  
Material Handling with Robotics  
(Jan-Hendrick Ohlendorf / Martin Rolbiecki,  
Universität Bremen)

11:30 – 12:00 Sustainable Material Usage of Rotor Blades in Cement  
Plants (Stephan Hinrichs, Holcim AG, Hamburg)

12:00 – 12:30 Recycling of Rotor Blades from Wind Turbines  
(Henning Albers, Hochschule Bremen)

12:30 – 13:15 Discussion and summary of the conference  
(Alexandra Pehlken, Universität Bremen)

13:15 – 14:45 *Lunch and Departures*