

CONTENT

Fundamentals: Intake and Product Water Quality

1. **Overview of desalination capacities and technologies**
Claus Mertes, Pöyry Energy GmbH, Germany
2. **Seawater properties – intake requirements**
Detlef Gille, Taprogge GmbH, Germany
3. **Pre-treatment technologies**
Example: Ultra Filtration
Josef Wunram, inge watertechnologies AG, Germany
4. **Post-treatment – freshwater properties:
Product requirements**
Dr. Stefan Panglisch, IWW, Germany

Desalination Plants: Technologies and Impacts

5. **Overview of desalination plant impacts**
Sabine Lattemann, University of Oldenburg, Germany
6. **Concentrating Solar Power (CSP) for Thermal
Desalination Technologies**
Claus Mertes, Pöyry Energy GmbH, Germany
7. **Renewable and conventional membrane technology**
Joachim Koschikowski, Fraunhofer Institut (ISE), Germany

Environment: Impact Assessment and Mitigation

8. **Energy use in desalination**
Sabine Lattemann, University of Oldenburg, Germany
9. **Desalination plant discharges – physical parameters**
Sabine Lattemann, University of Oldenburg, Germany
10. **Desalination plant discharges – chemical parameters**
Sabine Lattemann, University of Oldenburg, Germany
11. **Physical receiving water characteristics, pollutant loads,
physical mixing processes, intake and outfall requirements**
Dr. Tobias Bleninger, IfH Karlsruhe, Germany
12. **Environmental Impact Assessment (EIA) of desalination**
Sabine Lattemann, University of Oldenburg, Germany
13. **Regulatory approach for discharge permits**
Dr. Tobias Bleninger, IfH Karlsruhe, Germany
14. **Screening and design calculations – discharge modeling**
Dr. Tobias Bleninger, IfH Karlsruhe, Germany
15. **CVs**