Sustainability: Global Challenges, Opportunities and Sika Solutions

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Megatrend Sustainability

- CO_2
- Energy
- Water

Global Climate Asks for Reduced CO_2 Emission

- Allow reduction of clinker by fly ash / lime stone: reduction of up to 5% of global CO_2
- Reduced concrete consumption by using admixtures: -1% of global CO_2
- Blended cement reduces production energy consumption substantially
- Weight reduction in cars

Increasing E-Demand Asks for Better E-Mgmt

- Membrane-Roofing: 15% energy savings
- Insulation

  Facade

  Windows

  Basements
- Wind Energy
- Solar Energy

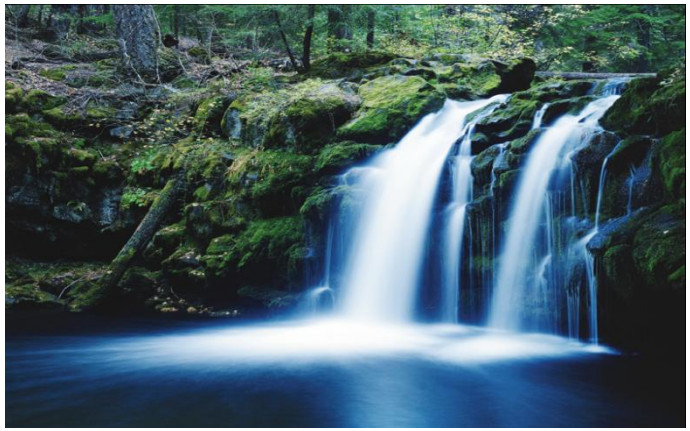
Reduced Water Consumption

- Optimized water management will play key role
- Increase demand for respective constructions
  - Reservoirs
  - Sewage handling
  - Purification facilities
  - Dams
  - Tunnels
  - Pipes
- Sika is the world leader in Waterproofing

Four Megatrends

Limited Resources

Climate



Water

Infrastructure

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Challenge #1: increasing demand for limited resources

Solutions

Focus: Energy- and resource-efficiency

Concrete production

- Admixtures for quality concrete made with recycled aggregates
- Admixtures for on-site recycling of excavated material

Cement production

- Grinding aids for energy-efficient cement production

Solutions

Focus: Energy- and resource-efficiency

Sealing / bonding of insulating glass and windows

- Special sealant for argon-filled insulating glass
- Bonding technology for energy-efficient and lighter windows

Commitment

Sika a recycling pioneer

- Thermoplastic membranes by Sika: significant sustainability advantage
- Recycling two points in the life cycle: after the manufacturing process and after the end of the roof's useful life
- Recycling of about 90% of the waste that occurs during production into newly manufactured membranes
- Sika - first single ply manufacturer in the United States to introduce a roof recycling program

Challenge #2: fast changing climate

Solutions

Focus: reducing carbon dioxide emissions

Moving more with reduced weight

- Structural adhesives
- Reinforcers

Switch to low carbon

- Adhesives for the solar industry
- Solar roofs
- Reflective liquid and sheet roofing membranes

Solutions

Focus: reducing carbon dioxide emissions

Wind energy

- Adhesives for the development of long-lasting wind turbines
- Protection against the elements
- Admixture technology

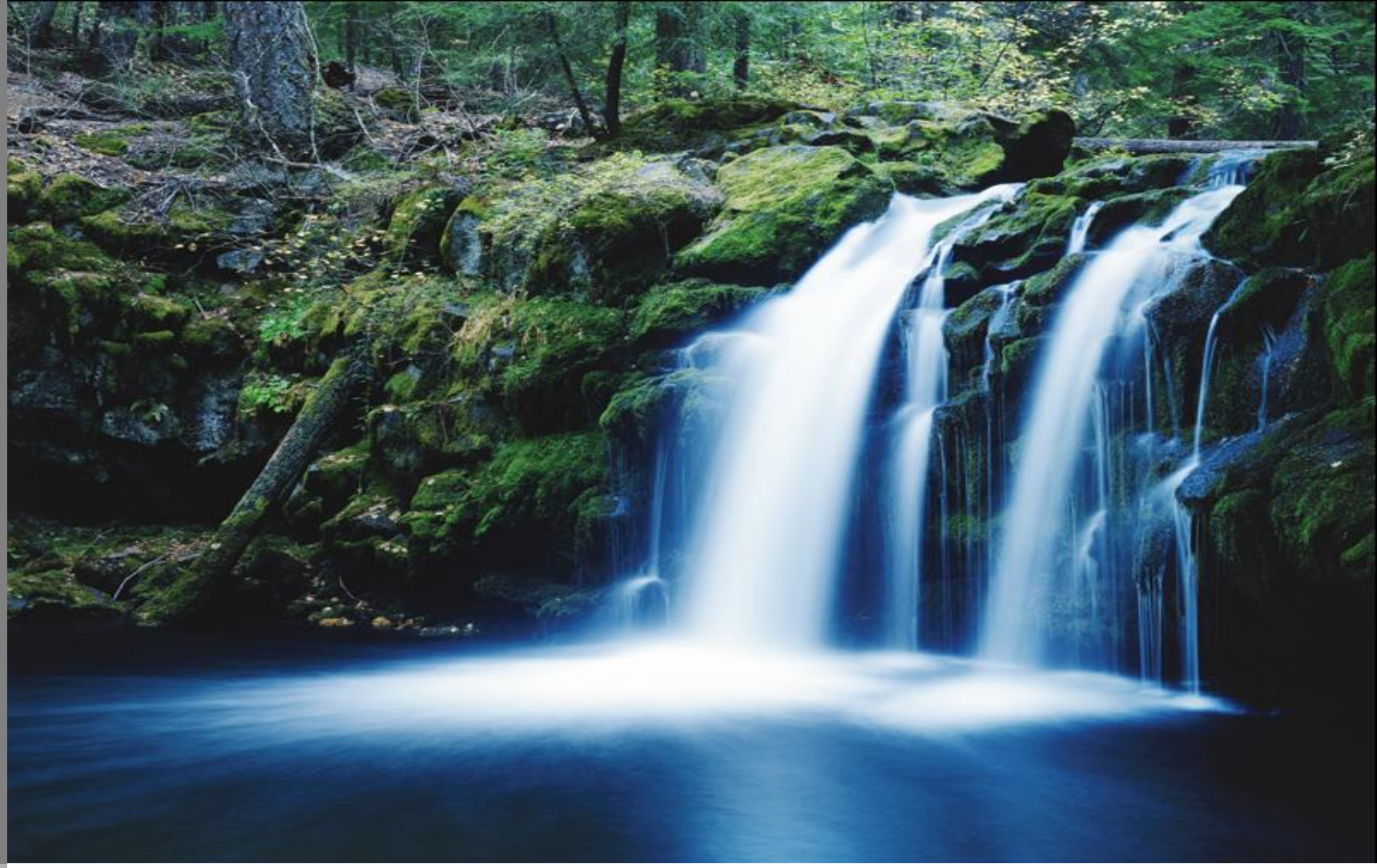
Commitment

Certification

- Sika among the first companies to be certified according to ISO 14001
- Today over 50 Sika companies – representing roughly 90% of group sales – adhere to ISO 14001

Reducing CO_2 emissions

- Sika has signed a contract with the Swiss Government to reduce CO_2 emissions
- This voluntary engagement covers about 20% of the CO_2 emissions of the Sika Group



Challenge #3: increasingly short supply of water

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Solutions

Focus: ensuring water supply in the future

Drinking Water

- Admixtures and mortars for watertight concrete
- Joint sealing systems for waterproof structures
- Internal coatings for the storage of potable water
- Membrane systems

Waste Water

- Mortars for concrete repair
- Coatings for surface protection
- Resins for crack repair sealing

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Commitment

- **Tradition**: Sika is closely related to water ever since the first Sika product Sika-1, a waterproofing additive
- **Operations**: Reduction of waste water in our plants is of high importance
- **Sponsorship**: Sika supports the Global Nature Fund within the program “Living Lakes”

Global Nature Fund

Challenge #4: rising need for efficient infrastructure

Solutions

Focus: better infrastructure

Getting traffic off the roads

- Construction chemicals
- Technical equipment
- Waterproofing membranes

Strengthening the structure

- Composite systems for durable infrastructure

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Solutions

Focus: better infrastructure

Roofing Membranes

- Membranes for cool roofs in hot climates
- Membranes for green roofs for better urban climates

Commitment

Cutting-edge building solutions

- Example I: Monte Rosa Lodge
- Contribution to the concept of sustainable construction: financial support & free supply of materials.
- Example II: Doha Convention Center, Qatar
- Waterproofing as fundamental factor in green building

Safety & Efficiency in Production

- 3-years 0-20-20 efficiency program
  - **Aspiration:** “Zero-accidents” (social sustainability**)**
  - **Expectation:** Minus 20 % energy / 20 % CO_2
  - **Expectation:** Minus 20% waste / 20% water

Cooperations

Sika is certified according to ISO 14001 since 1997. Operations and strategies are aligned with universally accepted principles in the areas of human rights, labor, environment and anti-corruption

We engage worldwide in sustainable construction and aim to effectively contribute to sustainable human progress

Voluntary contract with Swiss government to reduce CO_2-emissions. The contract covers about 20% of the worldwide CO_2-emissions of Sika

Sika focuses on projects managed by „Living Lakes“ and supports the protection and rehabilitation of lakes, wetlands and their catchment areas

Integrated Sustainability