

ENERGY, SCIENCE AND INNOVATION IN SWITZERLAND

Changes and Challenges Ahead

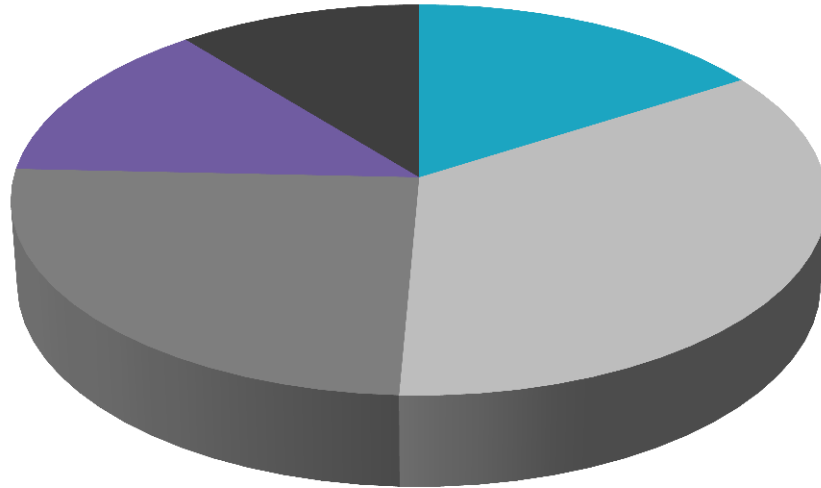


**FUTURE ENERGY
FORUM | 2017**

Building the Future. Saving the Planet.

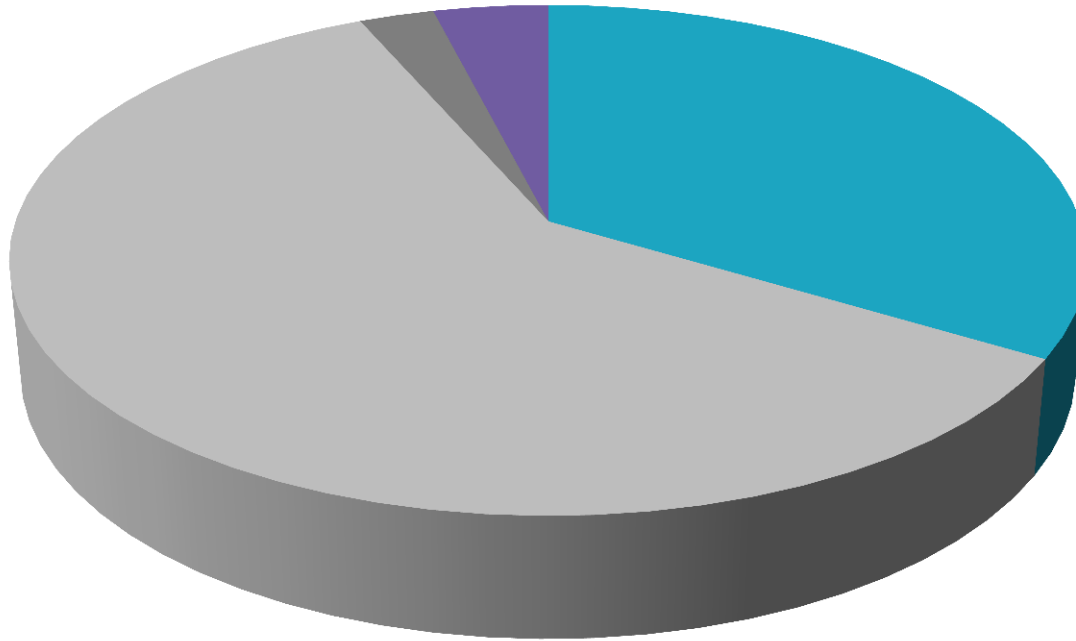
LOW CARBON TECHNOLOGIES

ENERGY MIX IN SWITZERLAND



- Petroleum 16%
- Fuel 35%
- Electricity 25%
- Gas 14%
- Rest 10%

ELECTRICITY MIX IN SWITZERLAND



- Nuclear 33%
- Hydropower 60%
- Dev. Renewables 3%
- Other 4%

TWO STRATEGIC CHANGES IN SWISS ENERGY LANDSCAPE

- Energy Strategy 2050
- COP 21 Targets

ENERGY STRATEGY 2050 (POPULAR VOTE MAI 2017)

➤ Phase out all Nuclear Power Plants

- No New Concessions
- Individual Power Plants can Continue as long as Security is Guaranteed

➤ Expand Renewable Energy

- Support Development
- Improve Legal Framework

➤ Increase Energy Efficiency

- Buildings
- Mobility
- Industry

CO2 REDUCTION TARGETS – WORK-IN-PROGRESS

(RATIFIED BY PARLIAMENT IN JUNE 2017)

➤ Reduce CO2 Emissions by 50% until 2030

- Suggestion:
 - 30% Nationally
 - 20% Internationally

➤ Focus on:

- Mobility
- Buildings
- Financial Incentives

➔ Aim: Coherence with Energy Strategy 2050

THE ROLE OF SCIENCE AND INNOVATION

8 Swiss Competence Centres of Energy Research

- Efficient Buildings & Districts
- Efficiency of Industrial Processes
- Future Swiss Electrical Infrastructure
- Heat Electricity Storage
- Supply of Electricity
- Energy, Society and Transition
- Efficient Technologies and Systems for Mobility
- Biomass for Swiss Energy Future

THE CHALLENGE: BRINGING INNOVATION TO THE MARKET!

- Networks between Research Institutions + Industries + NGOs
- Collaboration between the different types of Swiss Universities: ‚Fundamental Research‘ & ‚Applied Research‘
- Technology-Transfer Financing (Match-Making between Company + Research Institution)
- Internationalisation --> swissnex Network (Swiss Science Outposts) in Innovation Hotspots (also Expo 2017 Astana)