

Tagung der Alpenkonferenz Réunion de la Conférence alpine Sessione della Conferenza delle Alpi Zasedanje Alpske konference

XV

07.03.2019

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OL: FR

ERNEUERBARE ALPEN

A Bericht des Ständigen Sekretariats

B Beschlussvorschlag

Anlage

I. Fortschrittsbericht zur Vision "Erneuerbare Alpen" für die Jahre 2016-2018

A Bericht des Ständigen Sekretariats

Mit dem Beschluss AC XIV/A10g/4 ersuchte die XIV. Alpenkonferenz das Ständige Sekretariat, auf der XV. Alpenkonferenz über die in den Alpen in Hinblick auf die Vision der "Erneuerbaren Alpen" gemachten Fortschritte der einzelnen Vertragsparteien zu berichten.

Am 24. August 2018 bat das Ständige Sekretariat die Vertragsparteien um Aktualisierung der Schlüsselzahlen und Bekanntgabe aller seit 2016 auf den Weg gebrachten strategischen Entwicklungen, Maßnahmen und anderen einschlägigen Aktivitäten mittels eines entsprechenden Formulars. Diese Bitte wurde bei der 66. Sitzung des Ständigen Ausschusses wiederholt. Die Schweiz, Slowenien, Monaco, Frankreich, Deutschland, Italien und Österreich haben Informationen übermittelt, die im beigefügten Bericht zusammengestellt sind.

B Beschlussvorschlag

Die Alpenkonferenz nimmt den Bericht zum Fortschritt der Vision "Erneuerbare Alpen" zur Kenntnis und dankt dem Ständigen Sekretariat für dessen Erstellung sowie allen Vertragsparteien, die zu dem Bericht beigetragen haben.



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ANLAGE/ANNEXE/ALLEGATO/PRILOGA

1

PROGRESS REPORT ON THE VISION "RENEWABLE ALPS"

2016-2018

6 March 2019

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Key figures

The tables from the 2015-2016 Progress Report have been updated with the figures currently reported, displayed in *italic formatting*.

YEAR	Germany	Austria	France	Slovenia	Italy	
Share of energy from renewable sources in gross final energy consumption (%)						
2005	5,8	23,3	10,3	16,00	5,2	
2015	13,8	33,1	14,3	21,90	17,1	
2016				21,29		
2017			16,3		17,7	
Target 2020	18,0	34,0	23,0	25,00	17,0	
Energy efficiency: final energy consumption (Mtoe)						
2005	218,5	27,8	160,2	4,90	137,2	
2014	208,9	26,8	141,7	4,60	113,4	
2016				4,87		
2017			153,6		123,0	
Target 2020	194,3	25,1	131,4	5,10	124,0	
Greenhouse gas reduction						
Target 2020	-14%	-16%	-14%	+4%	-13%	
Renewable energy production						
2016 2017			295.914 GWh	13.374 GWh 12.553 GWh	103.700 GWh	

Table 1 Progress in renewable energy for comparable metrics of Germany, Austria, France, Slovenia and Italy. The results of Switzerland, Monaco and Liechtenstein are found in Table 2. Values from "Towards Renewable Alps – A progress report for the period 205-2016" (Permanent Secretariat of the Alpine Convention, 2017) and from current reporting by the contracting Parties for the XV Alpine Conference (figures 2016 & 2017).

Share of energy from renewable sources in gross final energy consumption 2005 2015 24,20% 24,20% 2017 22,30% 24,20% 2017 22,30% 24,20% 2020	Year	Switzerland	Liechtenstein	Monaco			
2015 2016	Share of energy from renewable sources in gross final energy consumption						
2016 2017 22,30% Target 2020 Renewable energy development 2005 1.045 GWh 8,2% 2014 2.616 GWh 2016 2017 Target 4.400 GWh -20% 2020 Energy efficiency: final energy consumption 2005 2014 2016 1,1 GWh 2017 52.705,8333 GWh Target 2020 Energy Efficiency 2005 2014 2016 1,1 GWh 2017 52.705,8333 GWh Target 2020 Energy Efficiency 2005 2014 2016 1,1 GWh 2017 52.705,8333 GWh Target 2020 Energy Efficiency 2005 2014 2017 1,1 GWh 2017 1,2 GWh	2005						
Target 2020 Renewable energy development 2005	2015						
Target 2020 Renewable energy development 2005	2016			24,20%			
2020 Renewable energy development 2005	2017	22,30%					
Renewable energy development 2005	Target						
2005 1.045 GWh 8,2% 2014 2.616 GWh 2016 2017 Target 4.400 GWh -20% 2020 Energy efficiency: final energy consumption 2005 2014 2016 1,1 GWh 2017 52.705,8333 GWh Target 2020 Energy Efficiency 2005 152 GJ/person 1.358 GWh 2014 136 GJ/person 1.228 GWh Target -20% -20% Renewable energy production							
2014 2.616 GWh 2017 Target 4.400 GWh -20% 2020 Energy efficiency: final energy consumption 2005 2014 2016 1,1 GWh 2017 52.705,8333 GWh Target 2020 Energy Efficiency 2005 152 GJ/person 1.358 GWh 2014 136 GJ/person 1.228 GWh Target -20% -20% Renewable energy production		•••					
2016 2017 Target 4.400 GWh -20% 2020 Energy efficiency: final energy consumption 2005 2014 2016			8,2%				
2017 Target 2020 4.400 GWh -20% Energy efficiency: final energy consumption 2005 2014 2016 1,1 GWh 2017 52.705,8333 GWh Target 2020 Energy Efficiency 2005 152 GJ/person 1.358 GWh 2014 136 GJ/person 1.228 GWh Target -20% -20% Renewable energy production		2.616 GWh					
Target 4.400 GWh -20% 2020 Energy efficiency: final energy consumption 2005 2014 2016	2016						
2020 Energy efficiency: final energy consumption 2005 2014 2016	2017						
Energy efficiency: final energy consumption 2005 2014 2016	_	4.400 GWh	-20%				
2005 2014 2016		6 . 1					
2016	0.00	ency: final energy consumption	n				
2016 2017 52.705,8333 GWh Target 2020 Energy Efficiency 2005 152 GJ/person 1.358 GWh 2014 136 GJ/person 1.228 GWh Target 2020 Renewable energy production							
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Target 2020 Energy Efficiency 2005				1,1 GWh			
2020 Energy Efficiency 2005		52.705,8333 GWh					
Energy Efficiency 2005 152 GJ/person 1.358 GWh 2014 136 GJ/person 1.228 GWh Target -20% -20% 2020 -20% Renewable energy production	_						
2005 152 GJ/person 1.358 GWh 2014 136 GJ/person 1.228 GWh Target -20% -20% 2020 -20% Renewable energy production		oncu					
2014 136 GJ/person 1.228 GWh Target -20% -20% 2020 Renewable energy production		•	1 259 CWh				
Target -20% -20% 2020 Renewable energy production		· •					
2020 Renewable energy production	2014	130 GJ/person	1.228 GWII				
2020 Renewable energy production	Target	20%	20%				
Renewable energy production	_	-2U 70	-ZU70				
		energy production					
2016 0.26 GWh	2016	3,1		0,26 GWh			
2017 53.811,6667 GWh		53.811,6667 GWh		-,			

Table 2 Values from "Towards Renewable Alps – A progress report for the period 205-2016" (Permanent Secretariat of the Alpine Convention, 2017) and from current reporting by the contracting Parties for the XV Alpine Conference (figures 2016 & 2017).

Activities

The Contracting Parties have reported a total of 11 recent activities. 10 of them regard the area of energy production/renewable energy (also tackling the issue of energy distribution in two cases), 8 energy consumption/efficiency and 3 address the development of knowledge and innovation. Only one activity tackles the fields of energy governance and the development of the EU Energy system.

LEGISLATION AND REGULATION

Law on Energy, 730.0. Switzerland

Energy consumption/efficiency Energy production/renewable energy

The law fixes objectives to attain regarding the development of indigenous renewable energy production, as well as its consumption. The objectives are:

- Production of electricity from a renewable origin of 4.400 GWh in 2020 and 11.400 GWh in 2035.
- Production of hydraulic energy of minimum 30.400 GWh in 2035.
- Reduction of the energy consumption of 16% by 2020 and 43% by 2035, and a reduction per capita of the electric consumption of 3% in 2020 and 13% by 2035.

Cantons and the Confederation take into account profitable zones for hydraulic and wind energy production in their spatial development planning.

The producers of renewable energy can count on financial advantages from the Confederation.

- 1. The use and development of renewable energy is of national interest.
- 2. Installations for the use of renewable energies, in particular storage power stations and pumped storage power stations, are of national interest from a certain size and importance, in particular within the meaning of Article 6 paragraph 2 of the Federal Act of 1 July 1966 on the Protection of Nature and the Landscape (NPA)1. In biotopes of national importance within the meaning of Article 18a NPA and the waterfowl and migratory bird reserves referred to in Article 11 of the Hunting Act of 20 June 19862, new installations for the use of renewable energies are prohibited.
- 3. Where an authority is required to decide on the authorisation of a construction, extension or renovation project or on the granting of a concession in respect of a pumped storage installation or power plant referred to in paragraph 1, the authority shall take a decision on the authorisation of the construction, extension or renovation project or on the granting of a concession in respect of a pumped storage installation or power plant referred to in paragraph 1. 2, the national interest attached to the implementation of these projects must be considered as equivalent to other national interests when weighing the interests. In the case of an item listed in the inventory referred to in Art. 5 NPA, an exception to the rule that an item must be kept intact may be considered.

- 4. The Federal Council determines the size and importance required for hydroelectric installations and wind turbines. It does this both for new facilities and for expansions and renovations of existing facilities. If necessary, it may also determine the size and importance required for other technologies and for pumped storage power plants.
- 5. In determining the size and importance required in accordance with para. 4, it takes into account criteria such as power, production or production flexibility over time and according to market needs.
- From 30.09.2016
- National

More information

https://www.admin.ch/opc/fr/classified-compilation/20121295/index.html

Ordinance on fostering the electricity production issued from renewable energies. Switzerland Energy production/renewable energy

The ordinance regulates the encouragement to electricity production made with renewable energies. It targets hybrid installations, biomass, biomass gas, residual warmth, coupling warmth and force production (in thermal installation and turbines), hydraulic and solar installations.

Section 2 Direct marketing and injection at reference market price

Art. 14 Direct marketing

- 1. Operators of installations with a capacity of less than 100 kW are exempt from the direct marketing requirement (Art. 21 LEne).
- 2. Operators of installations with a capacity of 500 kW or more who already receive a remuneration under the old law must switch to direct marketing.
- 3. All operators may switch to direct marketing at any time with three months' notice by the end of a quarter. The return to injection at the reference market price is excluded.

Art. 15 Reference market price

- The reference market price for electricity from photovoltaic installations corresponds to the
 average of the prices fixed in a quarter on the day-ahead electricity exchange for the Swiss
 market, weighted according to the actual injection per quarter hour of the photovoltaic
 installations with load curve measurement.
- 2. The reference market price for electricity from other technologies corresponds to the average of the prices set in a quarter on the day-ahead electricity exchange for the Swiss market.
- 3. The SFOE calculates and publishes the reference market prices every quarter.

Art. 16 Rates of remuneration and adjustment

- 1. The rates of remuneration by production technique, category and power class are set out in Annexes 1.1 to 1.5.
- 2. The remuneration rate for hybrid plants is calculated on the basis of the remuneration rates for the energy agents used, weighted according to their respective energy content. The entire production is used to determine the equivalent powers.
- 3. Remuneration rates are regularly monitored and adjusted in the event of substantial changes in conditions.

Art. 17 Duration of remuneration and minimum requirements

- 1. The remuneration period and minimum requirements are laid down in Annexes 1.1 to 1.5.
- 2. The payment period starts from the actual commissioning of the system and may not be interrupted. It shall begin to run even if the operator does not yet receive any remuneration for the installation.
- 1 01.11.2017
- National

More information

https://www.admin.ch/opc/fr/classified-compilation/20162947/index.html

Energy efficiency regulation for buildings. Monaco

Energy consumption/efficiency Energy production/renewable energy

The construction and renovation energy efficiency standards have been strengthened, and oil consumption by buildings for heating and hot water production has been banned in 2018. Oil has to be substituted in all buildings before 2022.

1 2018

National

STRATEGIES, POLICIES AND FRAMEWORKS

Italian National Integrated Plan for Energy & Climate (PNIEC). Italy

Energy consumption/efficiency Energy governance Energy production/renewable energy Energy distribution/smart grids EU energy system

The Italian Ministry for Economic Development in cooperation with other national institutions delivered a proposal of a National Integrated Plan for Energy & Climate (PNIEC) that EU member states use to define how to reach 2030 EU targets through de-carbonization, efficiency, security, internal market, R&D, innovation and competitiveness. Main targets include: 30% RES on final energy consumption (55% of which from electricity), reduction of primary energy consumption on PRIMES 2007 scenario by 43% (against a EU target of 32.5%), reduction on GHGs in ETS & non-ETS sectors of 55,9 and 34,6% respectively on 2005 values (against EU targets of -43% and -30%).

The Plan envisages the cooperation of all stakeholders that will be organised as a national process, and foresees a web-portal on the main themes of PNIEC where also the social dimensions of energy transition is considered.

2030

National level, EU

More information

www.mise.gov.it/images/stories/documenti/Proposta_di_Piano_Nazionale_Integrato_per_Energia_e_il_Clima_Italiano.pdf

Climate Strategy - South Tyrol Energy 2050. Italy

Energy consumption/efficiency: Energy production/renewable energy: Knowledge and innovation

South Tyrol Energy 2050 outlines the way in which South Tyrol can develop into an internationally recognized KlimaLand and how can sustainably shape its approach to energy management in the long term. The strategy describes how the Province can take advantage of the opportunity to build a low-emission economy while consolidating its position in terms of international competitiveness. The implementation of the measures included in the Climate Strategy will trigger regional growth, encourage innovation and consolidate the culture of sustainability in South Tyrol's society.

1 2011-2050

South Tyrol

More information

https://ambiente.provincia.bz.it/pubblicazioni.asp?publ action=4&publ article id=214427

MEASURES AND INSTRUMENTS

Decommissioning of the Mühleberg nuclear power plant. Switzerland Energy production/renewable energy

DETEC issues decommissioning decision for Mühleberg nuclear power plant (latest amendment 21.06.2018)

Bern, 21.06.2018 - On 20 June 2018, the Federal Department of the Environment, Transport, Energy and Communications (DETEC) issued a decision to decommission the Mühleberg nuclear power plant, ordering the decommissioning work.

In its decision, DETEC ordered that the decommissioning work be carried out in accordance with the decommissioning plan submitted by BKW in 2015. Various requirements will have to be met, in particular the technical, organisational and procedural conditions laid down by the Federal Nuclear Safety Inspectorate in its report of 30 August 2017. They concern in particular the organisation of decommissioning in three phases and various authorisations (see information sheet in annex).

After the shutdown of the nuclear power plant on 20 December 2019, a safe technical post-operation must first be established. To do this, all fuel elements will be transferred from the reactor vessel to the fuel deactivation pool and all necessary measures to ensure a high level of safety will be taken. Work to establish safe technical post-use is approved by ENSI, on the basis of the existing operating licence, under the licensing procedure (see link) and is therefore not regulated in the decommissioning decision.

The decommissioning decision (see link) covers the following decommissioning work: preparatory measures and work divided into three phases until it is officially established that the facility no longer represents a source of radiological risks. In its decision, DETEC requires BKW to submit a decommissioning plan for the conventional decommissioning of the plant to the SFOE by the end of 2027 at the latest. The decision may be appealed to the Federal Administrative Court within 30 days of its opening.





More information

https://www.uvek.admin.ch/uvek/fr/home/detec/medias/communiques-de-presse.msg-id-71204.html

The National pact. Monaco

Energy consumption/efficiency Energy production/renewable energy

The National Pact is a tool which supports progress. It comprises a simple commitment charter and action plans for various sectors of the economy, allowing everyone to contribute, in their own way, to Monaco's energy transition, the goals of which are clear: reduce greenhouse gas emissions, take

action to promote energy savings in the Principality, and increase local power generation from renewable sources.

2017

National

E-Mobility offensive 2019+2020. Austria

Energy consumption/efficiency Energy production/renewable energy

E-mobility powered by renewable energy sources is an important focus of the Austrian climate- and energy strategy, the #mission2030 to reduce greenhouse gas emissions, to increase energy efficiency and the share of renewable energy.

The Austrian Federal Ministry for Sustainability and Tourism (BMNT) and the Austrian Federal Ministry for Transport, Innovation and Technology (BMVIT) in closely collaboration with the economy – esp. the association of the car importers, the motorbike importers as well as the sports retailers – commenced a comprehensive deal to support e-mobility with renewable energy in Austria in a kind of a Public-Private-Partnership.

The package comprises a total volume of around € 93 million and focuses on fundings for E-mobility powered by renewable energies:

- 1. E-mobility for E-vehicles and charging infrastructure
- 2. E-mobility on the rails
- 3. E-mobility management, E-fleet and E-logistics

The implementation of the financial E-mobility funding has been realized within tried and tested structures in Austria esp. the National Environmental Support Scheme, the Austrian Climate- and Energy Fund and the klimaaktiv mobil program.

1 2019 – 2020

National

More information www.klimaaktivmobil.at www.umweltfoerderung.at

klimaaktiv mobil. Austria

Energy consumption/efficiency Energy production/renewable energy Knowledge and innovation

Klimaaktiv mobil is the initiative of the Austrian Federal Ministry for Sustainability and Tourism (BMNT) to provide active support for Austria's cities, municipalities and regions, businesses, fleet operators and associations, tourism operators, schools, youth initiatives and citizens in the transformation towards a clean low-emission mobility of tomorrow. Klimaaktiv mobil supports

measures focusing on mobility management, including alternative vehicles and e-mobility with renewable energy, cycling, intelligent multimodal mobility, innovative mobility services and ecodriving.

The cornerstones of the klimaaktiv mobil portfolio are consulting, education & certification, information & awareness raising, awarding of partners committed to CO₂-reduction projects and since 2007 financial support for investments in climate friendly mobility projects. In 2014 the integration of the klimaaktiv mobil support program in the national program for rural development 2014-2020 has been succeeded and enables the co-financing of projects in rural areas by the European Agricultural Fund for Rural Development (EAFRD).

Klimaaktiv mobil shows a successful track record until the end of 2018:

- 11,600 climate-friendly mobility projects initiated
- Annual savings of approximately half a million tonnes of CO₂
- Financial support for mobility projects amounting to a total of approx. € 108 million including approx. € 100.5 million from the national funds of BMNT via klimaaktiv mobil, Climate and Energy Fund and the national environmental support scheme, as well as € 7.6 million from EU funds (EAFRD), having triggered an environment-related investment volume of € 645 million
- Around 6,000 "green jobs" were secured or created
- With this total funding, tourism projects amounting to approx. € 4,75 million were supported (of which approx. € 4,68 million from national funds of the BMNT within the framework of klimaaktiv mobil, climate and energy funds and environmental promotion in Austria as well as approx. € 70.000 from EU funds/ELER).

1 2004 – 2020 (two phases)



More information www.klimaaktivmobil.at www.umweltfoerderung.at

PROJECTS AND EVENTS

Wind Atlas. Switzerland

Energy production/renewable energy Energy distribution/smart grids

The Wind Atlas (www.atlasdesvents.ch) indicates the most appropriate sites to exploit wind energy.

Bern, 12.05.2016 - In many parts of Switzerland, the regularity and strength of the wind are such that it can be used to generate electricity. The new Swiss Wind Atlas, developed on behalf of the Swiss Federal Office of Energy, provides information on wind direction and strength throughout Switzerland, with a resolution of 100 metres and at five different heights above ground level. For cantons and investors, the Wind Atlas is an important planning tool for wind energy development.

The new Wind Atlas shows that the Jura Arc and the Pre-Alps are not the only regions of Switzerland where wind conditions are interesting for generating energy. According to the energy outlook 2050, wind energy could cover 7 to 10% of Swiss electricity consumption by 2050.

The cantons are responsible for planning wind energy sites. In their master plans, they determine the locations that may or may not accommodate wind power facilities. The Swiss Wind Atlas is an important tool for this planning work. The website www.atlasdesvents.ch makes it possible to calculate more precisely the potential of wind energy in Switzerland, in particular by combining its information with geodata to exclude or reserve certain areas and for connection to the road and electricity networks.

The new Swiss Wind Atlas covers the entire country and is based on climate data collected over many years and on local wind measurements with a resolution of 100 metres. Wind strength and direction information is available for five heights above ground level (50 m, 75 m, 100 m, 125 m and 150 m). Compared to the 2011 wind map, the accuracy has been significantly improved, particularly in the Jura Arc, the Plateau and eastern Switzerland.



National

More information

www.admin.ch/gov/fr/accueil/documentation/communiques.msg-id-61667.html www.atlasdesvents.ch

ClimaHost. Germany/Austria

Energy consumption/efficiency Knowledge and innovation

In 2018, the Austrian Presidency of the Alpine Convention, Germany and the Permanent Secretariat of the Alpine Convention launched for the first time an Alpine-wide competition for climate change mitigation and energy efficiency in the hotel and catering industry under the title "ClimaHost". It emerged from a corresponding initiative and two projects within the framework of the German Presidency of the Alpine Convention 2015/2016.

The purpose of the competition is to promote best practice examples of exemplary climate change mitigation in the tourism sector of the Alpine region and, moreover, reach out to the countries of origin of the guests. In addition, it is intended to stimulate further efforts by other businesses in the sector, support sustainable tourism in the Alpine region, and strengthen the role of the Alpine Convention in climate change mitigation.

The winners will be announced at the XV Alpine Conference in April 2019.

Alpine-wide

More information www.climahost.eu