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

**XV**

07.03.2019

**TOP / POJ / ODG / TDR**

**A7**

**IT**

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**OL: FR**

**ALPI RINNOVABILI**

**A Relazione del Segretariato permanente**

**B Proposta di decisione**

**Allegato**

**I. Progress report on the vision “Renewable Alps” for the years 2016-2018**

## **A Relazione del Segretariato permanente**

La XIV Conferenza delle Alpi, mediante la decisione AC XIV/A10g/4, ha invitato il Segretariato permanente a presentare alla XV Conferenza delle Alpi una relazione sui progressi compiuti nelle Alpi dalle Parti contraenti in merito alla visione “Alpi rinnovabili”.

Il 24 agosto 2018, il Segretariato permanente ha esortato le Parti contraenti a aggiornare le cifre chiave e indicare gli sviluppi strategici, le misure e le altre attività d’interesse avviate a partire dal 2016, su un modulo appositamente predisposto. Tale richiesta è stata reiterata in occasione della 66<sup>esima</sup> sessione del Comitato permanente. La Svizzera, la Slovenia, il Principato di Monaco, la Francia, la Germania, l’Italia e l’Austria hanno fornito le informazioni presenti nella relazione ivi allegata.

## **B Proposta di decisione**

La Conferenza delle Alpi prende atto della relazione sullo stato d'avanzamento della visione "Alpi rinnovabili" e ringrazia il Segretariato permanente per averla predisposta nonché tutte le Parti contraenti che vi hanno contribuito.



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**ANLAGE/ANNEXE/ALLEGATO/PRILOGA**

**1**



XV Alpine Conference  
Agenda Item A7  
Annex

# PROGRESS REPORT ON THE VISION “RENEWABLE ALPS”

## 2016-2018

6 March 2019

## Table of contents

KEY FIGURES .....	3
ACTIVITIES .....	5
<b>LEGISLATION AND REGULATION .....</b>	<b>5</b>
<b>Law on Energy, 730.0. Switzerland .....</b>	<b>5</b>
<b>Ordinance on fostering the electricity production issued from renewable energies.</b> Switzerland .....	6
<b>Energy efficiency regulation for buildings. Monaco .....</b>	<b>7</b>
<b>STRATEGIES, POLICIES AND FRAMEWORKS .....</b>	<b>8</b>
<b>Italian National Integrated Plan for Energy &amp; Climate (PNIEC). Italy .....</b>	<b>8</b>
<b>Climate Strategy - South Tyrol Energy 2050. Italy .....</b>	<b>8</b>
<b>MEASURES AND INSTRUMENTS .....</b>	<b>9</b>
<b>Decommissioning of the Mühleberg nuclear power plant. Switzerland .....</b>	<b>9</b>
<b>The National pact. Monaco .....</b>	<b>9</b>
<b>E-Mobility offensive 2019+2020. Austria .....</b>	<b>10</b>
<b>klimaaktiv mobil. Austria .....</b>	<b>10</b>
<b>PROJECTS AND EVENTS .....</b>	<b>12</b>
<b>Wind Atlas. Switzerland .....</b>	<b>12</b>
<b>ClimaHost. Germany/Austria .....</b>	<b>12</b>

## 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
<b>Share of energy from renewable sources in gross final energy consumption (%)</b>					
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
<b>Energy efficiency: final energy consumption (Mtoe)</b>					
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
<b>Greenhouse gas reduction</b>					
Target 2020	-14%	-16%	-14%	+4%	-13%
<b>Renewable energy production</b>					
2016				13.374 GWh	
2017			295.914 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).

Year	Switzerland	Liechtenstein	Monaco
<b>Share of energy from renewable sources in gross final energy consumption</b>			
2005			
2015			
2016			24,20%
2017	22,30%		
Target 2020			
<b>Renewable energy development</b>			
2005	1.045 GWh	8,2%	
2014	2.616 GWh		
2016			
2017			
Target 2020	4.400 GWh	-20%	
<b>Energy efficiency: final energy consumption</b>			
2005			
2014			
2016			1,1 GWh
2017	52.705,8333 GWh		
Target 2020			
<b>Energy Efficiency</b>			
2005	152 GJ/person	1.358 GWh	
2014	136 GJ/person	1.228 GWh	
Target 2020	-20%	-20%	
<b>Renewable energy production</b>			
2016			0,26 GWh
2017	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)<sup>1</sup>. 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 1986, 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


1. 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.

 **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.

 **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](http://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.

 **2011-2050**

 **South Tyrol**

#### More information

[https://ambiente.provincia.bz.it/pubblicazioni.asp?publ\\_action=4&publ\\_article\\_id=214427](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.

 **21.06.2018**

 **Local**

#### More information

<https://www.uvek.admin.ch/uvek/fr/home/detec/medias/communiqués-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.

 **2019 – 2020**

 **National**

**More information**

[www.klimaaktivmobil.at](http://www.klimaaktivmobil.at)

[www.umweltfoerderung.at](http://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 eco-driving.

The cornerstones of the klimaaktiv mobil portfolio are consulting, education & certification, information & awareness raising, awarding of partners committed to CO<sub>2</sub>-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 CO<sub>2</sub>
- 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).

#### 2004 – 2020 (two phases)

##### National

#### More information

[www.klimaaktivmobil.at](http://www.klimaaktivmobil.at)

[www.umweltfoerderung.at](http://www.umweltfoerderung.at)

## PROJECTS AND EVENTS

### Wind Atlas. Switzerland

Energy production/renewable energy | Energy distribution/smart grids

The Wind Atlas ([www.atlasdesvents.ch](http://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](http://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.

 **May 2016**

 **National**

#### More information

[www.admin.ch/gov/fr/accueil/documentation/communiqués.msg-id-61667.html](http://www.admin.ch/gov/fr/accueil/documentation/communiqués.msg-id-61667.html)

[www.atlasdesvents.ch](http://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.

 **2018**

 **Alpine-wide**

<p><b>More information</b> <a href="http://www.climahost.eu">www.climahost.eu</a></p>
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