European Conference on Green Power Marketing
6 and 7 October 2005, Berlin

Green power in Switzerland
Current private and public measures

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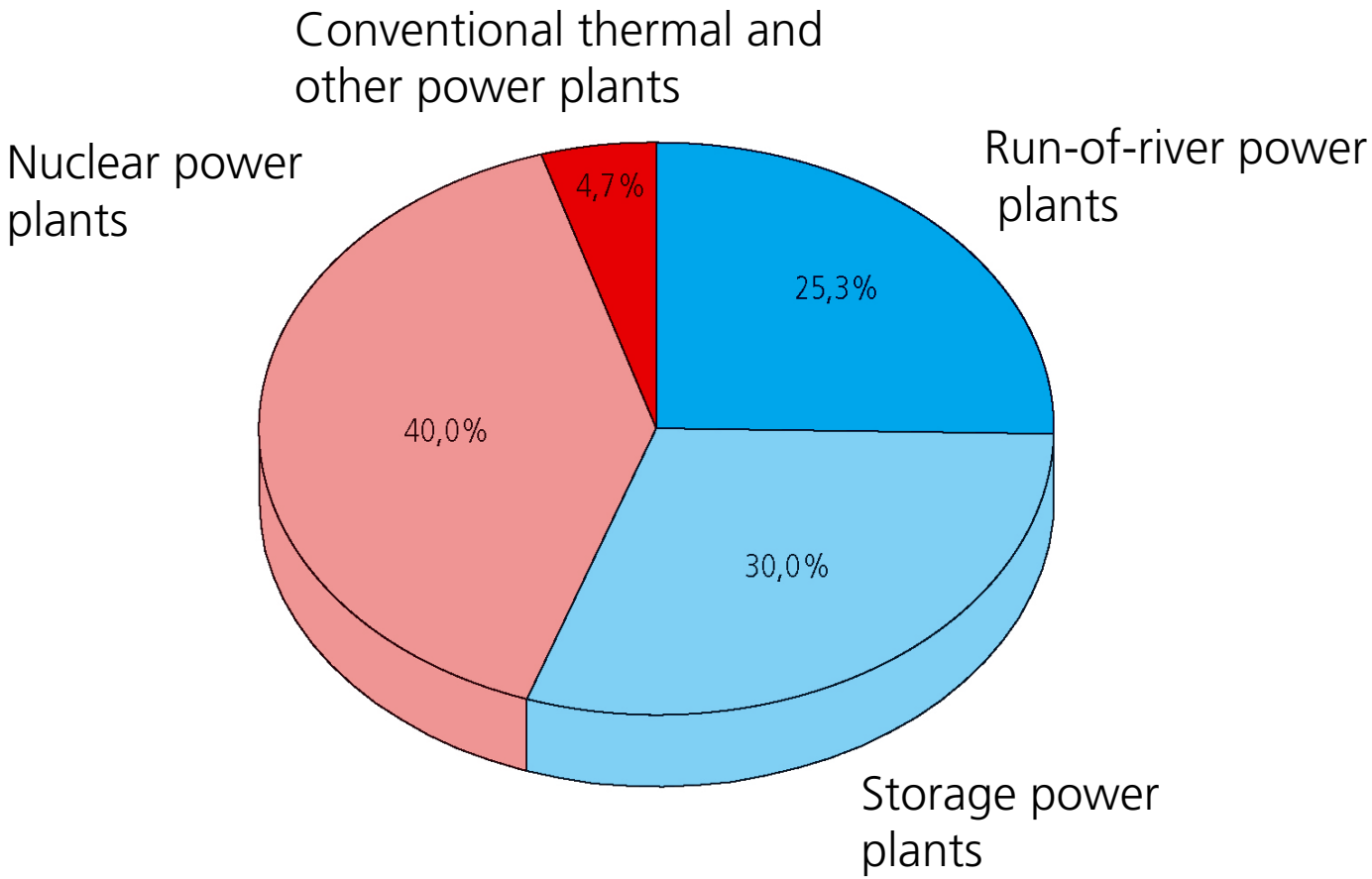
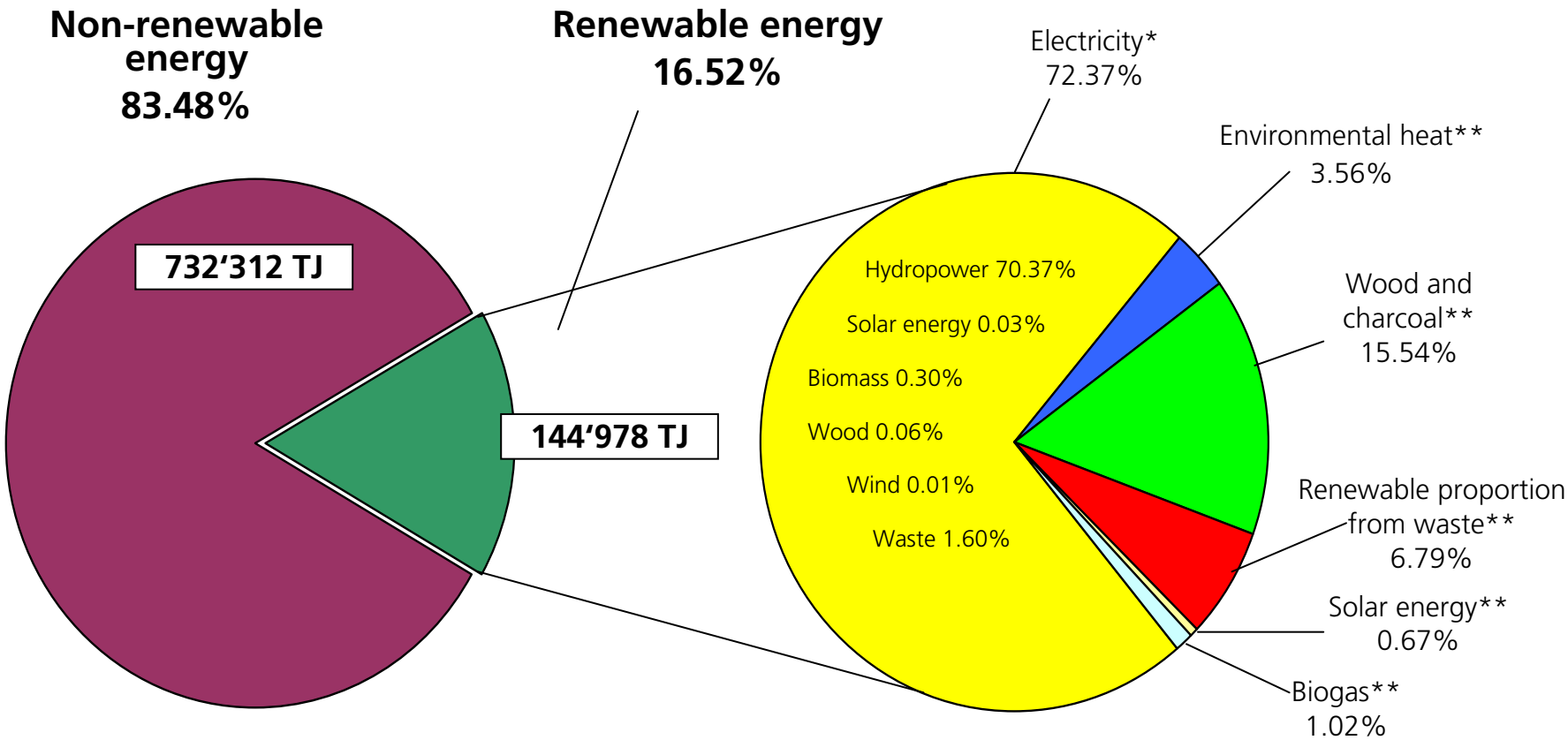
Electricity production in Switzerland in 2004 by power plant category, in %



Source: 2004 Swiss electricity statistics

2004 Swiss end energy consumption with proportion of renewable energy



Total 877'290 TJ

* total renewable electricity consumption

** end consumption of renewable heat

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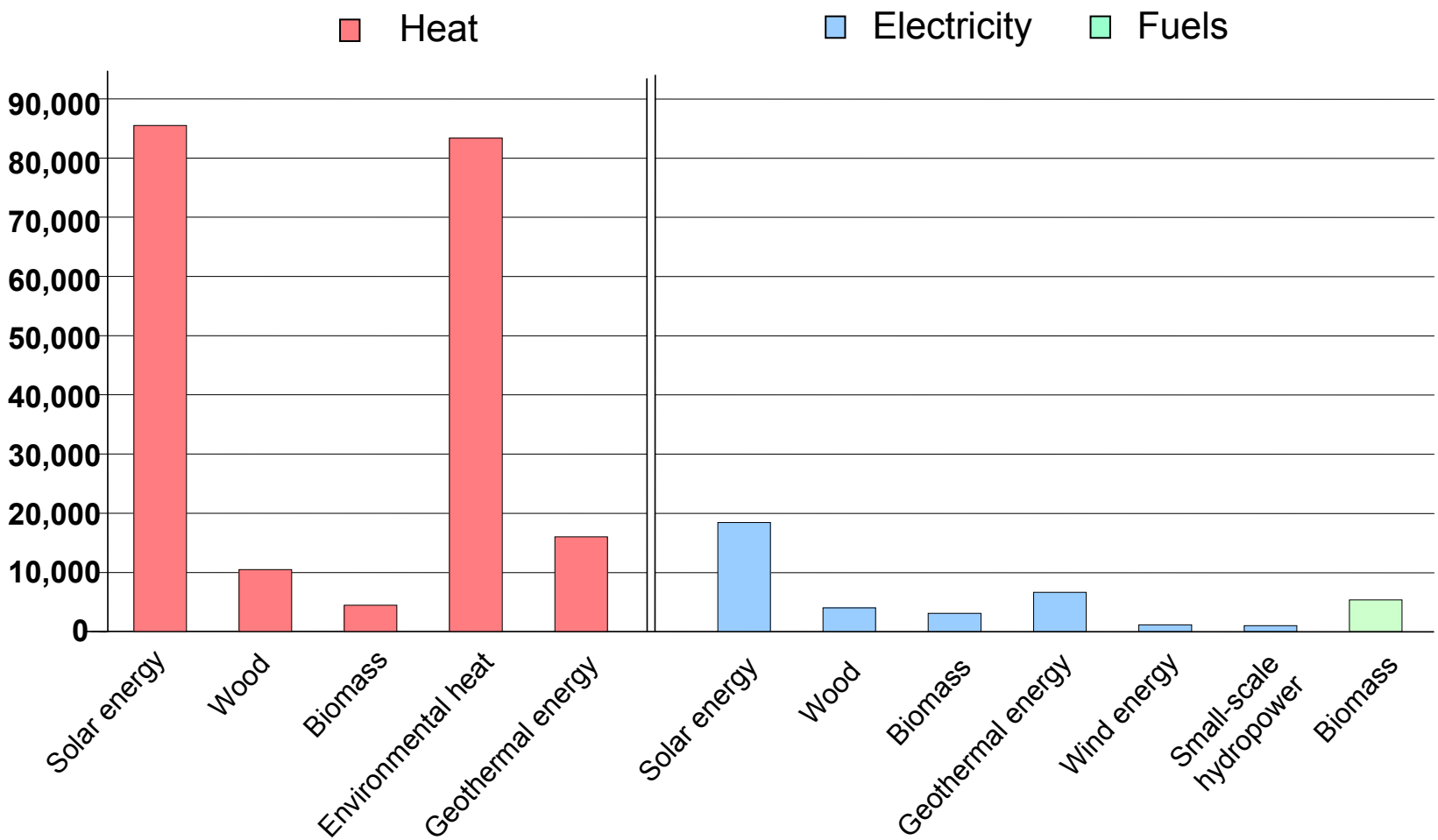
Ecological long-term potentials (GWh/a)



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Promotion models of the Federal Council: Energy Act + Electricity Supply Act

Cost-based input remuneration

or

Quotas + certificates

Requests for tenders:

- „Renewables“ [1)] (new facilities)
- Improvement of hydropower and waste incineration plants (increased production from existing facilities)

Art. 7 Energy Act: (existing and new facilities)

- 15 cents per kWh for „renewables“ [1)], hydropower <1MW
- Market rate for „other“ energy carriers, **including waste incineration plants, etc.**
- From 2005: financing of additional costs via transmission network and certificates of origin (for trading)

Now **possibly 2012**

[1)] **solar, wind, geothermal, wood, biogas**

Promotion of green power in the Electricity Supply Act: variants

Proportion of imports of renewable energy: e.g. 10%

Previous Article 7 ("15-cents clause") remains in effect (including for hydropower up to 1 MW)

Federal Council, 3.12.04

Target: increase prop. of renewable energy from 67 to 77%

„Request for tenders“

7a

„Request for tenders“ model Target: 67 -> 77% of cunsumption

Subsidiary instruments

7b

If target not met: „Quotas“ model

7c

If target not met: „Input remuneration“ model

Funds

„Request for tenders“ model, approx. 110 Mio p.a. (e.g. according to Association of Swiss Electricity Producers)

Majority, CESDE NC

Target: 5,400 GWh

„Request for tenders“

7a

Tenders for hydropower

+ efficiency programmes

+ geothermal energy (sureties)

+ „Input remuneration“ model for new renewables

7b

As per Federal Council

7c „Input remuneration“ model

For new renewables
+ cap, 0.3 cts per kWh
+ one technology max. 50%

Funds

„Request for tenders“ model (hydropower, efficiency programmes ea. approx. 10 million p.a.) Capping max. = 165 million p.a.

Minorities, CESDE NC

Target: 5,000 – 5,400 GWh

„Request for tenders“

7a

Variants

e.g. + cap 0.2 (0.3) cents per kWh

e.g. + 40% hydropower / 60% new renewables

e.g. + optional „Input remuneration“ model for small-scale producers

If target not met:
Referral to Parliament

Measures not yet defined

Funds

Tenders phase, 110 to 165 million p.a., depending on capping

The „15-Cent-Scheme“

Feed-in-tariffs for all independent suppliers:

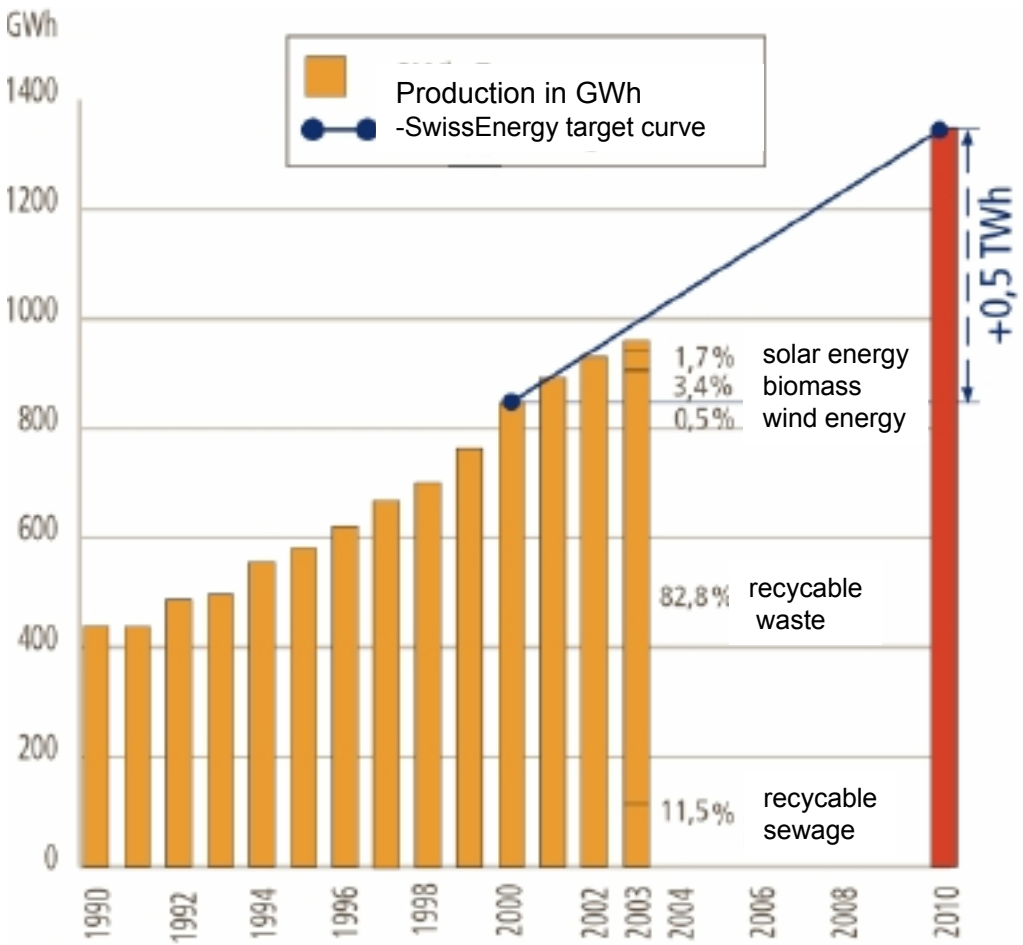
- Additional costs for supply companies are overtaken by **high-tension grid** (national grid-company) and paid by all consumers.

- For **new renewable** (solar, geothermic, wind, biomass) at the costs of similar electricity out of native production. 15 cents (CHF) as an average for new plants, 16 cents for plants constructed between 1992 und 1999.

- 15 cents for small **hydropower** as far as the production capacity of 1 MW, can be reduced depending on real production costs.

- For **waste incineration, fossil and large hydropower** plants feed-in-tariff is based on the marked-based purchase price (+- 6-9 cents).

Electricity production (excluding hydropower)



Electricity production (excluding hydropower)

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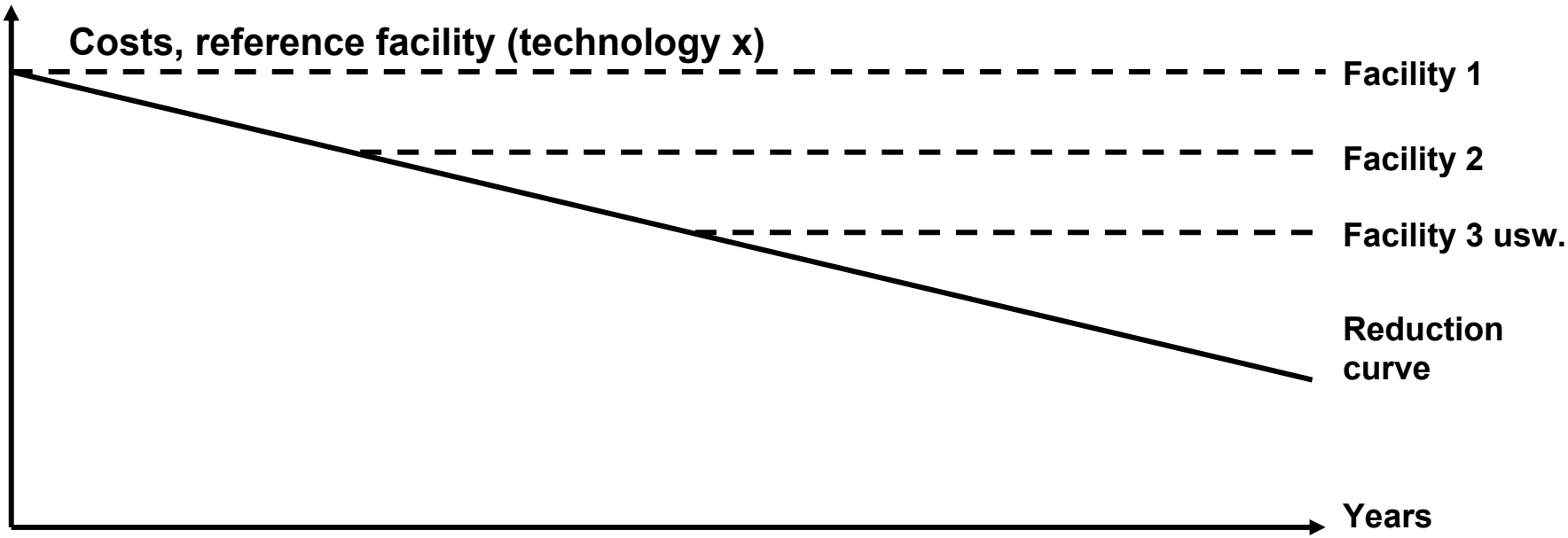
Cost-based input remuneration

Remuneration (cents per kWh)



- **Definition of technologies to be promoted: capacities, predictions concerning future costs and technological progress**
- **Reduction curve and duration of remuneration**
- **Questions: added ecological value, reserve energy and capacities, costs of network connection and expansion, possibility of upper threshold for additional costs per technology (= allocating quotas)**

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Distribution of sold green power differentiated by 2004 electricity production

	No. of suppliers	No. of subscribers	GWh
Solar power	151	29,400	6.0
Wind power	77	1,950	4.3
Hydropower	395	250,700	2,367.1
Mixed products	294	51,900	130.9
Total		334,100	2,508.3

Labelling requirement
Example

10 cm

7 cm

Electricity label

Supplier:	EVU ABC				
Contact:	www.EVU-ABC.ch; ph. 044-111 22 33		**Product:**	"ABC-Hydro"	
Year:	2005				
The electricity supplied to our customers has been produced as follows:			**"ABC-Hydro" has been produced as follows:**		
in %	**Total**	**From Switzerland**	**Total**	**From Switzerland**	
Renewable energy	**50.0%**	**40.0%**	**100.0%**	**100.0%**	
Hydropower	50.0%	40.0%	100.0%	100.0%	
Other sources	0.0%	0.0%	0.0%	0.0%	
Non-renewable energy	**45.0%**	**30.0%**	**0.0%**	**0.0%**	
Nuclear energy	45.0%	30.0%	0.0%	0.0%	
Fossil fuels	0.0%	0.0%	0.0%	0.0%	
Waste	**2.0%**	**2.0%**	**0.0%**	**0.0%**	
Non-verifiable sources	**3.0%**	-	0.0%	-	
Total	**100.0%**	**72.0%**	**100.0%**	**100.0%**	

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Solar plant on the roof of the new national football stadium in Berne (the biggest solar plant of Switzerland with the capacity of 1200 kW)

www.naturemade.ch

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