



www.fe.um.si/en/jet.html

REVIEW OF ENERGY REGULATIONS ON SOLAR ENERGY (PV) IN SLOVENIA AND AUSTRIA

PREGLED ENERGETSKE REGULATIVE ZA SONČNO ENERGIJO (PV) V SLOVENIJI IN AVSTRIJI

Franjo Pranjić³³

Keywords: PV-photovoltaics, Action Plan for Renewable Energy and Energy Efficiency

Abstract

This paper describes the regulation of solar energy (PV) in Slovenia and Austria, what parties provides support and incentives and how, who is eligible and who is not. All the principal documents regulating this area in Slovenia and Austria are listed. The present value of support for PV installations and a comparison of support schemes are also presented.

<u>Povzetek</u>

Članek opisuje energetsko regulativo na področju sončne energije (PV) v Sloveniji in Avstriji, kdo in kako zagotavlja podporo in spodbude, kdo je upravičen in kdo ni. Opisani so glavni dokumenti, ki urejajo to področje v Sloveniji in Avstriji. V članku so prav tako predstavljene sedanje višine podpor za fotonapetostne naprave ter primerjava podpornih shem.

Corresponding author: Franjo Pranjić, Tel.: +386 3 777 0402, Mailing address: University of Maribor, Faculty of Energy Technology, Koroška cesta 62a, 3320 Velenje

1 INTRODUCTION

The Kyoto Protocol 2020 compels the countries that signed it to reach a defined share of energy production from renewable energy sources (RES) and a defined reduction of emissions in each country. For that purpose, there are different regulations and initiatives to support energy production from renewable energy sources. This article presents and compares the support schemes in Slovenia and Austria for solar energy, i.e. photovoltaic installations (PVs).

2 SUPPORT SCHEMES IN SLOVENIA

Borzen, d.o.o. is a Slovenian power market operator. Its principal activity is the implementation of public service obligations relating to the organization of the electricity market, which includes the organization of the electricity market and the activities of the Centre for RES/CHP Support.

In Slovenia, electricity generated from renewable energy is supported mainly via a feed-in tariff and a premium tariff. Certain producers ("qualified producers") of electricity from renewable sources may choose between a guaranteed feed-in tariff and a bonus ("premium") in addition to the free market price for electricity. Furthermore, public calls for subsidy applications are organized, and loans are provided for projects in the field of renewable energy, [1].

2.1 Centre for RES/CHP

The centre administers the electricity feed-in support scheme for RES (renewable energy source) and CHP (high-efficiency cogeneration) power plants.

The feed-in support scheme is a tool to subsidize and thus advance the usage of renewable technologies for the production of electricity. There are currently roughly 3700 power plants included in the scheme, predominantly hydro and PV. The total installed capacity is about 500 MW.

The feed-in scheme, as well as other tools, is financed through dedicated add-on charges on the network fee bills of all users of electricity in Slovenia.

Power plant owners have the option of choosing between two types of support:

- "guaranteed purchase", whereby CP takes over the electricity from the power plant and sells it to the market (the producer is thus included in the special balance group operated by CP)
- "operating premium", whereby the producer sells its energy on the market while CP only pays a premium as a difference between the full ("guaranteed purchase") price and the market price, which is determined *ex ante* on a yearly level, also based on plant type.

Producers with power plants of installed capacity over 1 MW can only receive the "operating premium" support.

The feed-in system is based on guarantees of origin. All producers included in the scheme must issue and transfer to CP guarantees of origin as proof of RES / CHP production.

Based on the Slovenian Energy Law, the centre carries out also the following tasks, related to:

 guaranteeing the security of electricity supply based on the usage of domestic primary energy sources, ensuring an adequate level of installed capacity for the production of electricity and programmes for efficient use and saving of electricity, [1].

2.2 Means of support in Slovenia

Means of support in Slovenia are:

- · Feed-in tariff,
- Loan (Eko Fund).
- · Premium tariff,
- Subsidy scheme of the Ministry for Infrastructure and Spatial Planning.

2.2.1 Feed-in tariff

Regarding the feed-in tariff, producers of electricity from renewable sources (qualified producers) using plants of up to 1 MW may decide that they would like their electricity to be purchased at a fixed price.

The operators of renewable energy plants may sell their electricity to the Slovenian power market operator Borzen at a "uniform annual price", i.e. the feed-in tariff (alternatively, they can opt for a premium tariff). This guaranteed price applies only to plants whose capacity does not exceed 1 MW, [2].

Producers of electricity from renewable sources are eligible only if they have a valid declaration for the production device. All producers of renewable energy are usually deemed to have the declaration as long as they use any of the listed RES technologies, [2].

The tariff rates are calculated on a monthly basis due to the change in the regression mechanism, which implies a monthly degression of the Reference Costs by 2%.

	Building-mounted PV installations:	Other PV installations:
	up to 50 kWp: €ct 10.428 per kWh	up to 50 kWp: €ct 9.798 per kWh
	up to 1 MWp: €ct 9.536 per kWh	up to 1 MWp: €ct 9.026 per kWh
ĺ	up to 5 MWp: €ct 7.913 per kWh	up to 5 MWp: €ct 7.277 per kWh

Table 1: Slovenian feed-in tariffs for June 2014

For each following month, the tariff is reduced by 2%. Building-mounted PV installations up to 5 kWp (which are connected behind the end user's meter) are entitled to an additional 5% of the reference costs.

The entitled persons are those plant operators that have a valid award decision from the Energy Agency and a declaration for their RES-E power plant, [3].

PROCEDURE

The Energy Agency issues a public call by October each year, which is open to investors with RES and CHP power plants, to submit their projects for which they wish to receive support in the following year. [2]

Projects are selected on the basis of the following criteria:

- the available funds for the support for the next year set by the Government on the basis of the adopted annual energy balance sheets (EZ-1),
- compliance of the project with the goals of the NREAP and the goals set in the yearly energy balance sheets.
- the estimated level of guarantee of acquiring the necessary funds from the European Union funds,
- the proposed price (by the producer) of the electricity production costs that will be subject to the received support EZ-1).

The Energy Agency submits its decision to grant support to the plant operator, Borzen, and the plant operator shall then conclude a contract on the purchase of electricity, based on the decision.

The government may, in order to ensure the sustainability of the support scheme, limit the annual installed power of installations receiving support for specific technologies and energy sources, if the share of installed generating plants exceeds the yearly planned volume in the adopted Action Plan for Renewable Energy and Energy Efficiency, [2].

Eligibility period is no more than 15 years.

2.2.2 Loan (Eko Fund)

The Environmental Fund of the Republic of Slovenia (Eko sklad) awards low-interest loans to renewable energy projects through tendering (Terms and Conditions of the Eco Fund). At the moment (June 2014), there are two public calls for loans in the field of RES-E. The current calls for applications subsidise the reconstruction and renovation of renewable energy plants. They apply to municipalities, enterprises, sole traders and other legal entities in the Republic of Slovenia as well as residents.

Solar energy is eligible for this support with the exception of Industrial Ground-mounted PV Systems.

The amount of credit must be determined in line with the provisions of Terms and Conditions of the Eco Fund. According to these provisions, the amount of credit depends on the following factors:

- the amount of eligible costs,
- the type of investment,
- the evaluation of the environmental criteria,
- the credit rating of the eligible party and the debt insurance,
- the total budget available for a specific call, as defined in the public call document,
- the relevant state aid and "de minimis" limits.

The calls currently open provide a total of €24 million for municipalities, enterprises, and other legal entities and €8 million for residents. For legal entities, the maximum loan size is €2 million, the minimum loan is €23,000. For private individuals (residents), the loan amount ranges from €1,500 to €20,000 or €40,000 in special circumstances.

The maximum credit period is 15 years for legal entities and 10 years for private individuals. The credit period may, however, be extended for legal entities if they prove that such an extension is reasonable.

The minimum interest rate for legal entities and residents is the three-month EURIBOR rate plus 1.5 percentage points.

All public or private legal entities and natural persons whose place of residence, branch or head office is in Slovenia are eligible.

PROCEDURE

· Application:

Applicants submit their applications to the Environmental Fund of the Republic of Slovenia (Eco Fund), [4].

Loan award:

The decision on the award of a loan is based on the general provisions of administrative law and the procedure set out in the Rules on the Allocation of the Budget According to the terms of the current calls, the Fund decides on whether or not a loan will be granted and informs the applicant of this decision within a period of 90 days.

Loan contract for private individuals.

Private individuals must enter into a loan contract with the lending institution within 10 days of the loan being granted. The total amount of credit is paid either as a lump sum or in two instalments by the lending bank. The first instalment is 40% of the total loan amount and is paid within five days of the loan contract being signed. The remaining 60% are paid within five working days of the applicant submitting evidence that the investment has been made.

Loan contract for legal entities.

Except for municipalities, applicants must enter into a loan contract within six months of the date on which the loan is granted. Municipalities must sign the contract within nine months of the being is granted.

2.2.3 Premium tariff

Operators of renewable energy plants with an installed capacity of up to 1 MW may choose to sell their electricity directly on the market instead of receiving the guaranteed purchase price (feed-in tariff). In this case, they will receive a so-called "operational support" (i.e. a premium tariff). Power plants with a capacity of more than 1 and less than 10 MW (with the exception of CHP plants with capacity of up to 20 MW and wind power plants up to 50 MW) may only opt for this support scheme, [2,3].

Producers of electricity from renewable sources are eligible only if they have a valid declaration for their plant and an award decision from the Energy Agency. In principle, all RES plants receive the declaration.

The premium tariff is paid for the net amount of generated electricity that the producers themselves sell on the market or use for their own consumption, provided that the production costs of this energy are higher than the market price.

The amount of the premium tariff is the difference between the reference costs of electricity for each RES technology and the market price of electricity multiplied by a so-called "B factor", which leads to following formula:

Premium = RC (Reference costs) – MP (Market Price for electricity)*B factor (2.1)

In 2014, the reference market price of electricity amounts to €ct 4.331 per kWh.

The tariff rates are calculated on a monthly basis due to a change in the regression mechanism, which implies a monthly regression of the RC by 2%.

Building-mounted	RC (€ct per kWh)	B factor	Other PV	RC (€ct per kWh)	B factor
up to 50 kW	10.428	0.88	up to 50 kW	9.798	0.88
up to 1 MW	9.536	0.88	up to 1 MW	9.536	0.88
up to 10 MW	7.913	0.91	up to 10 MW	7.277	0.91
up to 125 MW	7.042	1	up to 125 MW	6.756	1

Table 2: Slovenian reference cost rates for June 2014

The entitled recipients are those plant operators that have a valid award decision from the Energy Agency and a declaration for their RES plant.

PROCEDURE

The Energy Agency issues a public call by October each year, which is open to investors with RES and CHP power plants, to submit their projects for which they wish to receive support in the following year.

Projects are selected on the basis of the following criteria:

- the available funds for the support for the next year set by the government on the basis of the adopted annual energy balance sheets,
- compliance of the project with the goals of the NREAP and the goals set in the yearly energy balance sheets,
- the estimated level of guarantee of acquiring the necessary funds from the European Union funds.
- the proposed price (by the producer) of the electricity production costs that will be subject to the received support.

The eligibility period limit is set to a maximum of 15 years.

2.2.4 Subsidy scheme of the Ministry for Infrastructure and Spatial Planning

The Ministry for Infrastructure and Spatial Planning of the Republic of Slovenia awards subsidies, state aid (regional aid, aid for small and medium enterprises) and "de minimis" aid. For investment projects, these are awarded through tendering.

The tender document sets out the technologies to be supported, the tendering process, and how the subsidy is paid. Tenders are launched on a regular basis (ca. 2-3 Tenders per month. Currently, all tenders that would support investments in RES-E projects are awarded via state-owned energy companies.

The subsidies, state aid and "de minimis" aid are intended to cover some of the costs related to the use of renewable energy instead of traditional energy sources. Please note the following important information:

- Subsidies are subject to a maximum of 50% of the eligible costs of an investment project; state aid and "de minimis" aid grants are subject to a maximum of 30%. Exceptional projects may be awarded 40/50% of the costs.
- The maximum grant is defined in each particular tender.

Certain grants are subject to a maximum (e.g. €50,000 for state aid and €200,000 / €100,000 for "de minimis" aid). In these cases, a report must be submitted to the Ministry of Finance.

The following entities are eligible for grants:

- For consulting services and projects in the fields of energy efficiency, renewable energy and CHP: local communities which have adopted the local energy concept.
- Households.
- For advisory services and investment projects in the fields of energy efficiency, renewable energy and CHP, all non-commercial public funds, public agencies, institutions, foundations and associations, registered churches and other religious communities.

PROCEDURE

Application

The tender document specifies the requirements for support. Applicants must submit a signed application form that comes with the tender document a full investment and financial plan and evidence that they have invested a certain amount of their equity in the project.

Award

Applications will be examined by a commission from the ministry or by the financier, according to the procedure set out in ZUP, [5].

Subsidy contract

The applicant shall sign a subsidy contract with the authority responsible for the payment of the subsidy (the Ministry for Infrastructure and Spatial Planning).

2.2.5 Statutory provisions

- ZUP (Zakon o splošnem upravem postopku neuradno prečišceno besedilo, PisRS z dne 22.02.2010 - Administrative Procedures Act)
- Energy Act (Energetski zakon)
- RS 37/2009 (Uredba o podporah električni energiji, proizvedeni iz obnovljivih virov energije –
 Uradni list RS, 37/2009 Decree on the Support for Electricity Generated from Renewable Energy Sources)
- RS 8/2009 (Uredba o izdaji deklaracij za proizvodne naprave in potrdil o izvoru električne energije Uradni list RS 8/2009 Decree on the Issue of Certificates for Energy Generation Plants)
- RS 57/2004 (Resolucija o Nacionalnem energetskem programu Uradni list, 57/2004 Resolution on the National Energy Programme)
- RS 50/2007 (Pravilnik o postopkih za izvrševanje proračuna Republike Slovenije Uradni list, 50/2007 - Regulation on the Allocation of the Budget)
- Statute of the Eco Fund (Akt o ustanovitvi Eko sklada, Slovenskega okoljskega javnega sklada Uradni list RS 112/2009 - Act on Establishing the Eco Fund – the Slovenian Environmental public Fund)
- Terms and Conditions of the Eco Fund (Splošni pogoji poslovanja za spodbujanje razvoja na področju varstva okolja – Uradni list RS 117/2005 – General terms and conditions for promoting the development in the field of environmental protection)
- Call No. 490B13 (Javni poziv za kreditiranje okoljskih naložb obcanov 470B12 Call for applications by the Eco Fund for environmental investments by citizens)
- Call No. 50PO13 (Javni poziv za kreditiranje okoljskih naložb 50PO13 Call for applications by the Eco Fund for environmental projects by legal entities)
- RS 2/2009 (Uredba o načinu določanja in obračunavanja prispevka za zagotavljanje podpor
 proizvodnji električne energije v soproizvodnji z visokim izkoristkom in iz obnovljivih virov energije Uradni list RS 2/09 Decree on the Calculation and Payment of the Support for HighEfficiency CHP Generation and Renewable Energy Generation)

3 SUPPORT SCHEMES IN AUSTRIA

In Austria, electricity from renewable sources is mainly supported through a feed-in tariff. Furthermore, the construction of PV installations on buildings and small or medium-sized hydro-electric power stations is supported through subsidies, [6].

Support schemes:

Feed-in tariff.

In Austria, electricity from renewable sources is supported mainly through a feed-in tariff, which is set out in the ÖSG 2012 and the regulations related thereto. The operators of renewable energy plants are entitled against the government purchasing agency, the so-called Ökostromabwicklungsstelle (hereinafter: "Clearing and Settlement Agency"), to the conclusion of a contract on the purchase of the electricity they produce ("obligation to enter into a contract").

• Subsidy II.

Additionally to the feed-in tariff, an investment subsidy is granted for PV installations exceeding 5 kW on buildings.

Subsidy III.

Furthermore, subsidies are granted for small PV installations with a maximum capacity of 5 kW.

3.1 Means of support in Austria

- Feed-in tariff (ÖSG 2012)
- Subsidy II (Investment Subsidy for PV)
- Subsidy III (Investment subsidy for small PV)

3.1.1 Feed-in tariff (ÖSG 2012)

Electricity from renewable sources is supported mainly through a feed-in tariff. The operators of renewable energy plants are entitled to the conclusion of a contract with a government purchasing agency, the Clearing and Settlement Agency, on the purchase of and payment for electricity as long as funds are available, [7].

The feed-in tariffs for the different renewable technologies are stipulated annually through a resolution of the Minister of Economy, Family and Youth, [7].

Solar energy is eligible under the following condition: the installation's capacity shall exceed 5 kWp, PV installations on roof-tops and facades with capacities over 5 kWp, up to 350 kWp, if application submitted and contract concluded until the end of 2014: €ct 12.5 per kWh. Other PV installations with capacities over 5 kWp, up to 350 kWp, if application submitted and contract concluded until the end of 2014: €ct 10.00 per kWh. [7]

· Entitled party

The persons entitled to the tariff are the operators of renewable energy plants. In order for a plant operator to be entitled to the tariff, the plant he claims tariff for must be licensed as a "green electricity plant" (Ökostromanlage). Plants are licensed by the governor.

Obligated party

The Clearing and Settlement Agency, which is obliged to the purchase of all electricity generated from renewable energy sources as long as funds are available. The Clearing and Settlement Agency is a private enterprise that has a state licence and is responsible for the purchase and sale of electricity from renewable sources within the territory of Austria.

· Electricity trader

The second party obligated to satisfy a claim for the feed-in tariff are the electricity traders, who are obliged to purchase the quantities of electricity assigned to them by the Clearing and Settlement Agency at the transfer price set by law.

PROCEDURE

The Clearing and Settlement Agency is obliged to purchase electricity from all renewable sources regardless of the generation technology used, under the following conditions:

- There are still funds available for the current year.
- The plant in question has been commissioned, and the contract with the Clearing and Settlement Agency has been concluded.
- The producer in question is obliged to supply green electricity for at least twelve calendar months.
- The producer is obliged to join the eco-balance group.
- The responsible authority is the Ministry of Economy, Family and Youth (BMWFJ).

The tariff for new plants may be gradually reduced to reflect the development of costs for a certain technology. The amount of annual reduction is determined by order of the Minister of Economy, Family and Youth, [7].

Entitlement to the tariff is time-limited, regardless of the source of energy used. A given operator of any other renewable energy plant is entitled to the purchase of electricity exported and to the payment of the tariff applicable on the date on which the contract is concluded, for 13 years starting on the date on which the plant is put into operation.

3.1.2 Subsidy II (Investment Subsidy for PV)

In addition to the feed-in tariff, an investment subsidy of 30% of the investment costs up to €200 per kW is granted for PV installations on buildings, [8].

Solar energy is eligible under the condition that the installation's capacity exceeds 5 kWp. For PV installations on buildings, the investment subsidy amounts to 30% of the investment costs but no

more than €200 per kWp.

The responsible authority is Ministry of Economy, Family and Youth (BMWFJ)

Until the end of 2014, the support fee is as follows, [7]:

- For users connected to voltage levels 1 to 3: €35,000 per calendar year.
- For users connected to voltage level 4: €35,300 per calendar year.
- For users connected to voltage level 5: €5,200 per calendar year.
- For users connected to voltage level 6: €320 per calendar year.
- For users connected to voltage level 7: €11 per calendar year.

3.1.3 Subsidy III (Investment subsidy for small PV)

Subsidies are granted for PV installations with a maximum capacity of 5kW:

- €275 kWp for roof-top or ground-mounted installations with a maximum capacity of 5 kW.
- €375 kWp for building integrated installations with a maximum capacity of 5 kW.

Subsidies can only be claimed by private parties, [9].

PROCEDURE

At the beginning of the process, the applicant has to make a request for a registration number. After the number is received, a personal online link to the application form is activated. The construction of the installation has to be accomplished before 15 December 2014. Hereafter, the support form has to be submitted to "Kommunalkredit Public Consulting". After checking the form and the attached documents, subsidies will be granted. [9]

4 COMPARISON OF SUPPORT SCHEMES IN SLOVENIA AND AUSTRIA

This chapter compares the previously described support schemes for both countries. Individual supports cannot be compared, since there are completely different (i.e. loans and premium tariffs in Slovenia-no such support in Austria).

Table 3: Support schemes in Slovenia and Austria

SI

ΑT

Feed-in tariff

Electricity from RES is supported mainly through a feed-in tariff.

The operators of RES plants are entitled against the government purchasing agency, the Clearing and Settlement Agency, to the conclusion of a contract on the purchase of the electricity they produce ("obligation to enter into a contract").

Subsidy II

In addition to the feed-in tariff, an investment subsidy is granted for PV installations on buildings exceeding 5 kW.

Subsidy III

Furthermore, subsidies are granted for small PV installations with a maximum capacity of 5 kW.

Feed-in tariff

Electricity from RES is supported through a feed-in tariff.

Producers of electricity from RES (qualified producers) using plants of up to 1 MW may decide that they would like their electricity to be purchased at a fixed price.

Premium tariff

As an alternative, licensed generators may opt for a premium (a so-called "operational subsidy") on top of the electricity price that they achieve on the free market.

Subsidies

In Slovenia, the Ministry of Infrastructure and Spatial Planning (Directorate for Energy, Energy Efficiency and Renewable Energy Sources Division) as well as the Slovenian Environmental Fund (Eko sklad) invite applications for tenders and publish public calls on a regular basis.

Loans

The Slovenian Environmental Fund (Eko sklad) invites applications for soft loans.

Table 4: Comparison of support schemes

SI

AT Subsidy II (Investment Subsidy for PV)

For PV installations on buildings, the investment subsidy amounts to 30% of the investment costs but no more than €200 per kW.

Subsidy III (Investment subsidy for small PV)

€275 kWp for roof-top or ground-mounted installations with a maximum capacity of 5 kW.

€375 kWp for building integrated installations with a maximum capacity of 5 kW (p. 3PV Guidelines 2014).

Subsidy scheme of the Ministry for Infrastructure and Spatial Planning

The subsidies, state aid and "de minimis" aid are intended to cover some of the costs related to the use of renewable energy instead of traditional energy sources.

Subsidies are subject to a maximum of 50% of the eligible costs of an investment project; state aid and "de minimis" aid grants are subject to a maximum of 30%. Exceptional projects may be awarded 40/50% of the costs. The maximum grant is defined in each specific tender. Certain grants are subject to a maximum (€50,000 for state aid and €200,000 / €100,000 for "de minimis" aid). In these cases, a report must be submitted to the Ministry of Finance.

Table 5: Comparison of amounts for Feed-in tariff

Country		Amount	Amount for Solar energy
AT	Feed-in tariff	The amount of tar- iff is determined for each source of en- ergy by the Minister of Economy, Family and Youth.	PV installations on roof-tops and facades with capacities over 5 kWp, up to 350 kWp, if the application submitted and contract concluded until the end of 2014: €ct 12.5 per kWh. Other PV installations with capacities over 5 kWp, up to 350 kWp, if the application submitted and contract concluded until the end of 2014: €ct 10.00 per kWh.
SI	Feed-in tariff (guaranteed price)	The tariff level mainly depends on the plant size.	The tariff rates are calculated on a monthly basis due to the change in the degression mechanism which implies a monthly degression of the Reference Costs by 2%. The feed-in tariffs for June 2014:
			Building-mounted PV installations: up to 50 kWp: €ct 10.428 per kWh up to 1 MWp: €ct 9.536 per kWh up to 5 MWp: €ct 7.913 per kWh
			Other PV installations: up to 50 kWp: €ct 9.798 per kWh up to 1 MWp: €ct 9.026 per kWh up to 5 MWp: €ct 7.277 per kWh
			Building-mounted PV installations up to 5 kWp which are connected behind the end user's meter are entitled to an additional 5% of the reference costs.

Table 6: Comparison of Degression for Slovenia and Austria

Country		Degression
AT	Feed-in tariff	The tariff for new plants may be gradually reduced to reflect the development of costs for a certain technology. The amount of annual reduction is determined by order of the Minister of Economy, Family and Youth.
SI	Feed-in tariff	The tariff rates are calculated on a monthly basis due to the change in the degression mechanism that implies a monthly degression of the Reference Costs by 2%. Building-mounted PV installations up to 5 kWp, which are connected behind the end user's meter are entitled to an additional 5% of the reference costs.

Country		Eligibility period
AT	Feed-in tariff	A given operator of any other renewable energy plant is entitled to the purchase of electricity exported and to the payment of the tariff applicable on the date on which the contract is concluded, for 13 years starting on the date on which the plant is put into operation.
SI	Feed-in tariff	The uniform annual price is guaranteed for the period agreed on by both contracting parties and laid down in the contract. The price is based on the reference price applicable on the day on which the contract is concluded and will be paid for no more than 15 years .

5 CONCLUSION

This paper describes energy regulation in the field of solar energy (PV) in Slovenia and Austria. In both countries, the national institutions are the ones who give the subsidies for PV. Slovenia has more types of support compared to Austria. Both countries have feed-in tariffs for which the eligibility period in Slovenia is 15 years and 13 years in Austria. Slovenia has divisions of power plants in three categories: up to 50 kWp, from 50kWp to 1MWp and from 1MWp up to 5MWp. Austria has up to 5 kWp and above 5kWp up to 350kWp. Furthermore, there are differences in amounts.

Slovenia	Austria
Building-mounted PV installations: up to 50 kWp: €ct 10.428 per kWh up to 1 MWp: €ct 9.536 per kWh up to 5 MWp: €ct 7.913 per kWh Other PV installations: up to 50 kWp: €ct 9.798 per kWh	Building-mounted PV installations (on roof-tops and facade): • from 5kWp up to 350kWp: €ct 12.5 per kWh • up to 1 MWp: €ct 9.536 per kWh Other PV installations:
 up to 1 MWp: €ct 9.026 per kWh up to 5 MWp: €ct 7.277 per kWh 	• capacities over 5 kWp, up to 350 kWp: €ct 10.00 per kWh.

In Slovenia, the generation of electricity from renewable energy sources is supported through a feed-in tariff. Producers of electricity from renewable sources (qualified producers) using plants of up to 1 MW may decide that they would like their electricity to be purchased at a fixed price. In Austria, electricity from renewable sources is supported mainly through a feed-in tariff. The operators of renewable energy plants are entitled against the government purchasing agency to the conclusion of a contract on the purchase of the electricity they produce.

Slovenia has as an alternative for licensed generators. They may opt for a premium (a so-called "operational subsidy") on top of the electricity price that they achieve on the free market.

In Slovenia, the Ministry of Infrastructure and Spatial Planning (Directorate for Energy, Energy Efficiency and Renewable Energy Sources Division) as well as the Slovenian Environmental Fund (Eko

sklad) invite applications for tenders and publish public calls on a regular basis. The Slovenian Environmental Fund (Eko sklad) also invites applications for soft loans.

In addition to the feed-in tariff, Austria offers an investment subsidy is granted for PV installations on buildings exceeding 5 kW (30% of the investment costs but no more than €200 per kWp) and furthermore, subsidies are granted for small PV installations with a maximum capacity of 5 kW (€275 kWp for roof-top or ground-mounted installations with a maximum capacity of 5 kW and €375 kWp for building integrated installations with a maximum capacity of 5 kW) that can only be claimed by private parties.

References

- [1] Borzen, organizator trga z električno energijo, d.o.o. (www.borzen.si/)
- [2] Energy Act Slovenia (http://www.uradni-list.si/1/content?id=116549)
- [3] Decree on the Support for Electricity Generated from Renewable Energy Sources, RS 37/2009 (Uredba o podporah električni energiji, proizvedeni iz obnovljivih virov energije Uradni list RS, 37/2009)
- [4] Terms and Conditions of the Eco Fund (Splošni pogoji poslovanja za spodbujanje razvoja na področju varstva okolja Uradni list RS 117/2005 General terms and conditions for promoting the development in the field of environmental protection)
- [5] ZUP (Zakon o splošnem upravem postopku neuradno prečišceno besedilo, PisRS z dne 22.02.2010 Administrative Procedures Act)
- [6] Legal Sources on renewable Energies (http://www.res-legal.eu)
- [7] ÖSG 2012 Federal Act on the Support of Electricity Produced from Renewable Energy Sources (Bundesgesetz, mit dem Neuregelungen auf dem Gebiet der Elektrizitätserzeugung aus Erneuerbaren Energieträgern und auf dem Gebiet der Kraft-Wärme-Kopplung erlassen werden)
- [8] ÖSET-VO 2012 Regulation of the Minister of Economy, Family and Youth determining the feed-in tariffs for the purchase of electricity from renewable energy plants on the basis of contracts to whose conclusion the Clearing and Settlement Agency is obligated from 1 July until the end of 2013 (Verordnung des Bundesministers für Wirtschaft, Familie und Jugend, mit der die Einspeisetarife für die Abnahme elektrischer Energie aus Ökostromanlagen auf Grund von Verträgen festgesetzt werden, zu deren Abschluss die Ökostromabwicklungsstelle ab 1. Juli 2012 bis Ende des Jahres 2013 verpflichtet ist)
- [9] PV Guidelines 2014 (Leitfaden Photovoltaik-Anlagen 2014)

Nomenclature

PV Photovoltaics

NEP National Energy Program

CP Support Centre

NREAP National Renewable Energy Action Plan