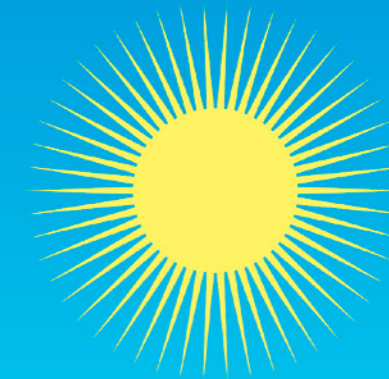
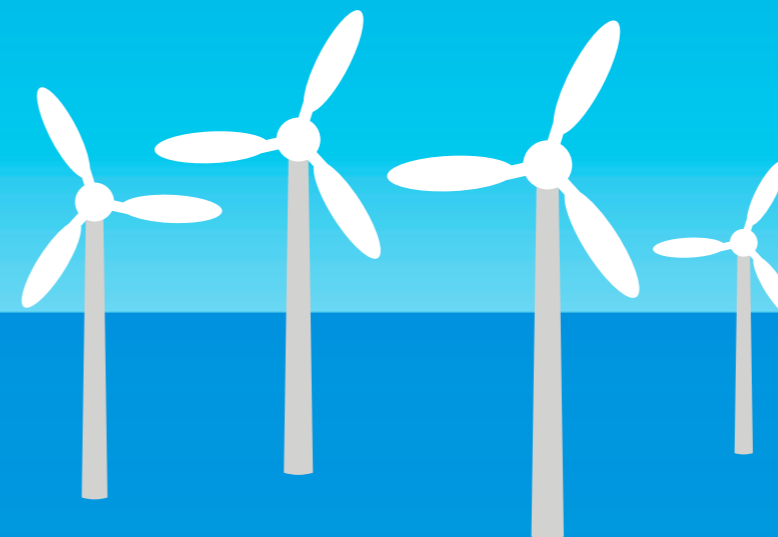




Netherlands Enterprise Agency



# SDE+ Autumn 2017



Instructions on how to apply for a subsidy for the production of renewable energy

Opening period: 3 – 26 October 2017



Commissioned by the Ministry of Economic Affairs

>> Sustainable. Agrarian. Innovative. International

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# About the SDE+

## General

The SDE+ is an incentive scheme for the production of renewable energy in the Netherlands. Renewable energy is generated from clean, inexhaustible sources.

There will be two periods for SDE+ subsidy applications in 2017, one in spring and one in autumn. The SDE+ round of applications for autumn 2017 runs from 9 am on 3 October to 5 pm on 26 October 2017. The autumn budget totals €6 billion.

The SDE+ round of applications for spring 2017 is closed.

## What is the SDE+?

The SDE+ is an operating (feed-in-tariff) subsidy. Producers receive a guaranteed payment (subsidy) for the energy they generate from renewable sources. The production of renewable energy is not always profitable, as the cost of production is higher than for fossil energy. SDE+ compensates for the difference between the cost price of renewable energy and the market value of the energy supplied: the non-profitable portion.

Subsidies are allocated for periods of 8, 12 or 15 years.

The duration of your subsidy will depend on which technology you use. Similarly, the amount of the subsidy depends on the technology used and the amount of renewable energy produced.

## What are the cornerstones of SDE+?

1. one budget for all categories taken together;
2. a phased release of funds;
3. a maximum base amount per production installation;
4. a “free category”.

There are two rounds of SDE+ applications in 2017. Each round is divided into three phases, each of which is subject to a maximum phase amount. There is one budget (for all categories together) per round of applications. The “less expensive” forms of technology may apply for a subsidy in the first phase. You can also apply for a lower subsidy than the maximum base amount for the technology in question. Such applications fall within the so-called “free category”. In such cases, your application can be tailored to your particular business case, for amounts equal to multiples of a tenth of a eurocent per kilowatt-hour. The amount of subsidy applied for, must be lower than or equal to the maximum phase amount and higher than the base energy price.

## Which energy sources does SDE+ apply to?

In 2017, SDE+ subsidies are available for the production of:

- renewable electricity;
- renewable gas; and
- renewable heat or combined heat and power (CHP).

For energy from:



Biomass



Geothermal



Hydro



Wind



Solar

## Who can apply for the SDE+?

The target groups are companies, institutes and (non-profit) organisations that produce or intend to produce renewable energy. The national government is not allowed to apply for SDE+ subsidies.

## Who is the applicant?

Only the intended producer may apply for the SDE+. If the applicant does not intend to set up and operate the production installation itself, it does not count as an intended producer.

## Who is eligible for the SDE+?

To be eligible for an SDE+ subsidy, your application must be completed in full, so be sure to read this brochure and the “SDE+ Feasibility Study Guidebook” (*Handleiding haalbaarheidsstudie SDE+, Dutch only*) carefully. Make sure your application includes proper justification for your project, a thorough feasibility study and all necessary permits and appendices and that you have filled in the digital application form completely.

Tip: make use of the “[SDE+ Feasibility Study Template](#)” (*Model Haalbaarheidsstudie SDE+, Dutch only*).

# New in SDE+ 2017

## Key changes since 2016

### General

- As in previous years, there are two application rounds for SDE+ in 2017: spring and autumn. In 2017, each round will have three phases.
- The maximum base amount of €0.150/kWh has been lowered to €0.130/kWh in 2017, since the cost price of renewable energy has dropped.
- Each phase has a maximum phase amount, rising from 9 €ct/kWh (6.4 €ct/kWh for renewable gas) in phase 1 to 13 €ct/kWh (9.2 €ct/kWh for renewable gas) in phase 3.
- The total SDE+ autumn budget for 2017 is €6 billion.

### Biomass

- Co-gasification and co-firing in coal-fired power stations: These SDE categories are closed in the SDE+ round of applications for autumn 2017;
- Thermal conversion for heat: the minimum capacity for boilers for the production of industrial steam from wood pellets has been lowered from  $\geq 10$  MWth to  $\geq 5$  MWth.
- CHP installations: MEP conversion to SDE+ has expired for this category. Extended lifespan will still be available in 2017, however this option will expire in 2018.
- Mono-fermentation of manure: the upper limit for the maximum configured capacity of 400kW for these categories is new in 2017. The permitted amount of full load hours for CHP mono-fermentation of manure has been set at 7,200. Applications for mono-fermentation projects that are larger than this, may be submitted under the category “co-fermentation of manure”.
- Tender for mono-fermentation of manure: in July 2017, a separate tender has been opened for small-scale mono-fermentation of manure. For up-to-date information, please see the [website](#).

### Geothermal

- There will be no CHP Geothermal category in 2017.

### Wind

- The map of “Wind speeds for individual Dutch municipalities” has been updated. The municipal divisions will apply to SDE+ Autumn 2017 as of 1 January 2017. Due to large differences in wind speed the municipality of Rotterdam is subdivided upto neighbourhood level.

### Solar

- Solar thermal: subsidy applications in this category may be submitted for installations with covered solar collectors and a total thermal capacity of  $\geq 140$  kW. Capacity is calculated based on a thermal capacity of 0.7 kW per square metre of solar collector aperture surface.
- Solar PV: There are two solar PV categories in the autumn round. Solar PV with a capacity  $\geq 15$  kWp and  $< 1$  MWp and the category Solar PV with a capacity  $\geq 1$  MWp. The period within operation must start at the latest for Solar PV with a capacity  $\geq 15$  kWp and  $< 1$  MWp has been changed from three years into a year and a half. Only solar PV projects with a large-scale energy connection to the grid are eligible for SDE+ subsidy. Be sure to collect accurate information from your network administrator on the connection costs. Producers with small-scale energy connections may apply under the [netting scheme \(salderingsregeling\)](#), the [Energy Investment Allowance \(EIA\)](#) or [Energy Conservation and Sustainable Energy for Sports Premises \(Energiebesparing en duurzame energie sportaccommodaties, EDS\)](#).

### Feasibility study

If you are applying for subsidy for an installation with a rating of more than 500 kW (0.5 MW), you must perform a [feasibility study](#) and include the results of this study in your application. Such a feasibility study is also required if you are applying for a subsidy for several installations with a combined total power rating of 500 kW (0,5 MW) or more in the same round of applications. If the total capacity of your production installations for any single round exceeds 500 kW (0.5 MW), make sure to include a feasibility study for every application. The feasibility study must contain a substantiation of the equity capital for the total number of projects in the same round of applications for the same applicant.

### The SDE+ contribution

The cost price for the production of renewable energy is recorded in the base amount for the technology. The market value of the energy supplied is recorded in the correction amount.

The SDE+ compensates for the difference between the cost price and the market value of the energy supplied. The maximum SDE+ contribution is therefore equal to the maximum base amount minus the correction amount.

It follows that the SDE+ contribution you receive depends on energy price trends. If the energy price goes up, you get a lower SDE+ contribution, but your energy purchaser will pay you more. If, on the other hand, the energy price falls, you will get a higher SDE+ contribution, but will receive less from your energy purchaser.

The subsidy granted to you by the Netherlands Enterprise Agency in its grant is the maximum subsidy over the entire period of the subsidy (8, 12 or 15 years). This maximum is determined based on the indicated capacity and the maximum number of full load hours for the technology. The base energy price is used to determine the grant and budget claim. The base energy price is the lower limit for the correction amount. The correction amount cannot be lower than this. If the correction amount is equal to the base energy price, the maximum subsidy is reached. The ultimate subsidy payments are calculated per year based on the amount of energy produced and the actual energy price. You will receive a subsidy up to a maximum number of full load hours per year. Subsidies are also subject to a maximum term, depending on the technology used.

Maximum SDE+ contribution = maximum base amount - correction amount

**Maximum base amount** (cost price of renewable energy)

**The SDE+ contribution**

**Correction amount**  
(market value of energy supplied)

**Base energy price**

**Negative electricity price**

No SDE+ subsidy is given for feeding renewable electricity into the grid if the price of electricity is negative for an uninterrupted period of six hours or more. Small projects (with a nominal power of less than 500 kW per connection) or projects where the subsidy was applied for, before 1 December 2015 are exempt from this ruling. The limit for wind energy projects is 3 MW.

**Terms**

*Full load hours*

The maximum number of production hours at full load (nominal capacity) per year for which the subsidy is paid.

*Latest term for operation*

The period (after the subsidy is granted) within which the installation must start producing energy.

*Subsidy period*

The maximum period (in years) in which the subsidy can be received.

*Banking*

The Stimulation of Sustainable Energy Production Decision (Besluit SDE) allows for the possibility of banking. This means unused production eligible for subsidy can be used in later years. In addition, producers can also carry over any excess output (i.e. electricity generated over and above the maximum level eligible for subsidy) to a following year. This can be used if production is lower than expected in a later year. This latest form of banking is maximised to 25% of the annual production eligible for subsidy.

This ruling applies to:

- all new projects;
- existing projects that have already been allocated SDE or SDE+ subsidies with the exception of windprojects subject to the windfactor, which forms an alternative to banking which already covers the operator against the risk of missing out on subsidy funds.

The Banking Calculation Model (Dutch only) allows you to calculate your SDE+ subsidy based on the fluctuations in your production installation's annual production.

**Calculation example: SDE+ contribution**

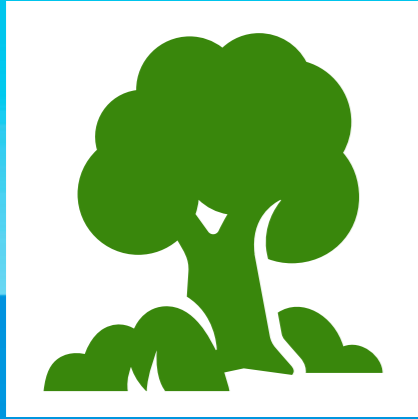
New 3 MWe hydroelectric power plant, drop of  $\geq 50$  cm

Maximum phase amount phase 1 (free category)	9,0 €ct/kWh
Maximum base amount phase 3	13.0 €ct/kWh
Provisional correction amount 2017	3.2 €ct/kWh
Provisional SDE+ 2017 contribution applied for in phase 1 at 9.0 €ct/kWh	$9.0 - 3.2 = 5.8$ €ct/kWh = 58 €/MWh
Provisional SDE+ 2017 contribution applied for in phase 3 at 13.0 €ct/kWh	$13.0 - 3.2 = 9.8$ €ct/kWh = 98 €/MWh
Maximum number of full load hours eligible for subsidy	5,700
Maximum annual production eligible for subsidy for new 3 MWe hydroelectric power plant	$3 * 5,700 = 17,100$ MWh
<b>Provisional annual SDE+ 2017 contribution applied for in phase 1 at 9.0 €ct/kWh</b>	<b><math>58 * 17,100 = \text{€}991,800</math></b>
<b>Provisional annual SDE+ 2017 contribution applied for in phase 3 at 13.0 €ct/kWh</b>	<b><math>98 * 17,100 = \text{€}1,675,800</math></b>

The SDE+ contribution indicated is a provisional contribution, based on the provisional correction amount for 2017.

The correction amount will be finalised in the calendar year following the year of production, followed by an adjustment based on advance sums already paid. The correction amount (provisional and final) is re-established each year, on the basis of the evolution of the energy price.

The base or phase amount applied for applies to the entire duration of the SDE+ subsidy.



## BIOMASS

The SDE+ Autumn 2017 supports the production of energy from biomass.

You can apply for subsidies on mono- and co-fermentation of manure, all-purpose fermentation, thermal conversion, wastewater and sewage treatment and gasification.

You can also apply for a subsidy to extend the lifespan of installations previously subsidised under (OV)MEP.





## 1. Which installations qualify for SDE+ subsidy in 2017?

### **Mono- and co-fermentation of manure**

You can apply for subsidies when renewable gas, renewable heat and/or renewable electricity are the end products.

Installations previously subsidised under (OV)MEP which have reached the end of their ten-year subsidy period also qualify for the SDE+ subsidy under the “extended lifespan” category. These installations need to be at least seven years old when the SDE+ subsidy is applied for. Owners of such installations have the option of switching to renewable gas or renewable heat.

For the co-fermentation of manure, the rule applies that if you request an extended lifespan for your installation and there is also a “grant for heat extension”, the latter grant will be cancelled once the grant period begins for the extended lifespan.

The upper limit for the maximum configured capacity of 400 kW for mono-fermentation of manure categories is new in 2017.

The permitted amount of full load hours for CHP mono-fermentation of manure has been set at 7,200. Applications for mono-fermentation projects that are larger than 400 kW may be submitted under the category “co-fermentation of manure”.

In July 2017, a separate tender has also been opened for small-scale mono-fermentation of manure. Please visit the [website](#) for up-to-date information about the tender.

### **All-purpose fermentation**

You can apply for subsidies when renewable gas, renewable heat and/or renewable electricity are the end products. Owners of installations with MEP subsidies have the option of switching to renewable gas or renewable heat, and may also be able to

apply for an SDE+ subsidy under the extended lifespan category in 2017. Such installations must have previously received MEP subsidies. These installations need to be at least seven years old when the SDE+ subsidy is applied for. If an extended lifespan subsidy is applied for and the installation already has an “extended heat subsidy”, the latter will in any case be terminated as soon as the extended lifespan subsidy period begins.

### **Thermal conversion**

You can apply for subsidies when renewable gas, renewable heat and/or renewable electricity are the end products. In addition, for installations previously subsidised under the MEP, an extended lifespan subsidy can be applied for. These installations need to be at least seven years old when the SDE+ subsidy is applied for.

There are four different categories of biomass boilers which qualify for subsidies in 2017. They differ in their power rating and the type of biomass they can handle as follows:

- liquid biomass boiler with a capacity of  $\geq 0.5$  MWth;
- solid (or liquid) biomass boiler with a capacity of  $\geq 0.5$  MWth and  $< 5$  MWth;
- solid (or liquid) biomass boiler with a capacity of  $\geq 5$  MWth;
- wood pellet boiler for industrial steam production with a minimum capacity of  $\geq 5$  MWth. The minimum capacity for subsidy application in 2017 is lower than it was in 2016.

For biomass boilers of 0.5-5 MWth, the number of full load hours has been lowered from 4,000 to 3,000.

The final biomass boiler category may now also be supplemented with up to 15% grade A wood pellets in addition to fresh wood pellets.

The use of grade B wood is not allowed.

In the case of the first and the last category, verifiable evidence must be provided that the biomass source meets the relevant sustainability requirements. The requirements for liquid biomass follow from the EU [Renewable Energy Directive](#) (RED).

The information on the sustainability criteria for wooden pellets is provided under “Sustainability criteria” on the next page. You can also apply for a subsidy for the category “Thermal conversion of biomass for CHP”.

For the “Thermal conversion of biomass for CHP” category, installations must have a capacity of 100 MWe or less, and the electrical efficiency must be at least 10%. You can also apply for a subsidy for the category “Thermal conversion of biomass for CHP – extended lifespan”, for installations with a capacity of no more than 50 MWe.

The following requirements also apply:

- If liquid biomass is used, it must be demonstrated that the sustainability criteria of RED have been met;
- No B-grade wood may be used as fuel (this requirement does not apply to the extended lifespan category);
- At least 95% of the energy produced by the fuel must be biogenic (renewable).



### **Co-gasification and co-firing categories closed**

These categories are closed in the SDE+ round of applications for autumn 2017. It is stipulated in the Energy Agreement (*Energieakkoord*) that co-firing of biomass should be stimulated for a maximum amount of 25 PJ per annum. In the SDE+ subsidies were allocated for a total of 25 PJ per annum. Therefore, these categories are not stimulated in the Autumn round.

### **Sustainability criteria**

The condition set for the categories in which solid biomass is used is that they satisfy sustainability criteria. This relates to the category “Boiler for the production of industrial steam from wood pellets  $\geq 5$  MWth”. The sustainability criteria are applicable to all types of woody biomass.

The producer must make a reasonable case to support claims that the biomass used satisfies the sustainability criteria for solid biomass. These requirements are included in appendix 4 of the General Implementing Regulations for Stimulating Sustainable Energy Production (*Algemene uitvoeringsregeling stimulerende duurzame energieproductie*). More information on the sustainability criteria can be found on the SDE+ website. In addition, work is being done on the embedding and certification of the sustainability criteria in the Environmental Management Act (*Wet Milieubeheer*). The expectation is that this process can be completed in 2017. Until then, enforcement will be based on a reporting obligation. Further information on this process can be found on the [SDE+ website](#).

### **Wastewater treatment installation/Sewage treatment installation thermal pressure hydrolysis**

Water treatment installations that are equipped with thermal pressure hydrolysis will be eligible for the SDE+ subsidy in 2017. Fermentation installations that are already equipped with a gas engine will also be eligible. However, the installation for thermal pressure hydrolysis must be new to qualify for subsidy.

### **Sewage treatment installation thermophilic fermentation of secondary sludge**

Thermophilic fermentation installations in which sewage sludge (including at least 50% secondary sludge) is processed qualify for subsidy. In this regard, the secondary sludge being processed must mainly come from sewage treatment installations other than the sewage treatment installation where the fermentation installation will be located. The biogas produced is converted into electricity and/or heat using a CHP plant. The fermentation installation must be new for this category as well to qualify for subsidy.

### **Wastewater treatment installation/Sewage water treatment installation renewable gas**

Subsidies are available for the category “Wastewater and sewage water treatment installations producing renewable gas”. For existing fermentation installations, however, the gas cleaning upgrading installation for the recycling/reprocessing and possible injection of renewable gas must be new. The installation may not be part of a green gas hub.

### **Gasification**

A category for the production of renewable gas through the gasification of biomass is introduced in the 2017 SDE+ incentive scheme. The production of syngas is not subsidised, as this has to be converted into methane before it can be fed into the gas grid. Hub applications are allowed in the autumn round.





## 2. Features and changes since 2016

### ***Mono-fermentation of manure***

The upper limit for the maximum configured capacity of 400kW for these categories is new in 2017. The permitted amount of full load hours for CHP mono-fermentation of manure has been set at 7,200. Applications for mono-fermentation projects that are larger than this may be submitted under the category “co-fermentation of manure”.

### ***Biomass boilers***

For larger biomass boilers of 0.5-5 MWth, the number of full load hours has been lowered from 4,000 to 3,000.

### ***Co-gasification and co-firing***

These categories are closed in the SDE+ round of applications for autumn 2017.

### ***Wood pellet boilers for industrial steam production***

The lower limit for the capacity to apply for subsidy for the “Wood pellet boilers for industrial steam production at 10 MWth or more” category has been lowered to  $\geq 5$  MWth.

In this category, fresh wood pellets may be supplemented with grade A wood pellets for up to 15%.

The use of grade B wood is not allowed.

The subsidy period for the category “Wood pellet boilers for industrial steam production” is eight years.

### ***Conversion of MEP to SDE+***

Conversion of MEP to SDE+ under the “CHP installations” category has been discontinued. However, extended lifespan is still available (see “Thermal conversion”).

### ***Determining the capacity in the case of combined generation***

In the case of combined generation of electricity and heat (CHP installations) a distinction is drawn between the heat capacity and the electrical capacity of an installation. Producers can vary the ratio between heat and electricity production. For grant applications, the nominal electrical capacity (in line with the specifications of the manufacturer), the nominal heat capacity (in line with the specifications of the manufacturer), and the total capacity of the production installation for which a grant is being applied for must be stated. The total capacity can never be greater than the sum of the nominal electrical capacity and the nominal heat capacity. For a combination of a steam turbine and a boiler, for example, the total capacity for which a grant is requested can never be higher than the nominal heat capacity of the boiler.

### ***Determining the electrical efficiency of the production installation***

The regulation includes requirements for the electrical efficiency of the installation. The electrical efficiency is determined as described below.

- for a combustion engine: the electrical capacity divided by the sum of the electrical capacity and the heat capacity; and
- for a boiler with a steam turbine or ORC: the electrical capacity divided by the heat capacity of the boiler.

### ***Hub application***

New in the SDE+ Autumn 2017 is the hub application for the categories “Biomass fermentation extended lifespan” and “Gasification of biomass”.



### 3. Phasing and rates for Biomass

Renewable heat and CHP

2017	Phase 1 From 9 am, 3 October	Phase 2 From 5 pm, 9 October	Phase 3 From 5 pm, 16 October to 5 pm, 26 October	Base energy price	Provisional correction amount 2017	Maximum full load hours per annum	Maximum subsidy period (years)	Operation must start at the latest within (years)
Renewable heat and CHP from Biomass	Maximum base amount/phase amount (€/kWh)			(€/kWh)				
<b>All-purpose fermentation for heat</b> • All-purpose fermentation • Extended lifespan	0.058 0.055	0.058 0.055	0.058 0.055	0.022 0.012	0.023 0.012	7,000 7,000	12 12	4 3
<b>All-purpose fermentation for CHP</b> • All-purpose fermentation • Extended lifespan	0.065 0.067	0.065 0.067	0.065 0.067	0.021 0.021	0.022 0.022	7,436 7,464	12 12	4 3
<b>Fermentation of manure for heat</b> • Fermentation/co-fermentation • Fermentation/co-fermentation, extended lifespan • Mono-fermentation ≤ 400 kW	0.075 0.064 0.090	0.075 0.064 0.102	0.075 0.064 0.102	0.022 0.012 0.022	0.023 0.012 0.023	7,000 7,000 7,000	12 12 12	4 3 4
<b>Fermentation of manure for CHP</b> • Fermentation/co-fermentation • Fermentation/co-fermentation, extended lifespan • Mono-fermentation ≤ 400 kW	0.085 0.077 0.090	0.085 0.077 0.110	0.085 0.077 0.125	0.021 0.021 0.030	0.022 0.022 0.031	7,433 7,464 7,200	12 12 12	4 3 4
<b>Thermal conversion for heat</b> • Liquid biomass boiler ≥ 0.5 MWth • Solid or liquid biomass boiler ≥ 0.5 MWth and < 5 MWth • Solid or liquid biomass boiler ≥ 5 MWth • Wood pellet boiler ≥ 5 MWth	0.070 0.055 0.043 0.062	0.070 0.055 0.043 0.062	0.070 0.055 0.043 0.062	0.022 0.028 0.012 0.012	0.023 0.029 0.012 0.012	7,000 3,000 7,000 7,000	12 12 12 8	4 4 4 4

Continued →



Renewable heat and CHP continued

2017	Phase 1 From 9 am, 3 October	Phase 2 From 5 pm, 9 October	Phase 3 From 5 pm, 16 October to 5 pm, 26 October	Base energy price	Provisional correction amount 2017	Maximum full load hours per annum	Maximum subsidy period (years)	Operation must start at the latest within (years)
<b>Renewable heat and CHP from Biomass</b>	<b>Maximum base amount/phase amount (€/kWh)</b>			<b>(€/kWh)</b>				
<b>Thermal conversion for CHP</b> • Biomass ≤ 100 MWe • Extended lifespan ≤ 50 MWe	0.053 0.061	0.053 0.061	0.053 0.061	0.014 0.019	0.015 0.019	7,500 4,429	12 12	4 3
<b>Wastewater treatment and sewage treatment</b> • Thermal pressure hydrolysis	0.084	0.084	0.084	0.031	0.032	8,000	12	4
<b>Sewage treatment</b> • Thermophilic fermentation of secondary sludge	0.048	0.048	0.048	0.023	0.024	5,729	12	4



Renewable gas

2017	Phase 1 From 9 am, 3 October	Phase 2 From 5 pm, 9 October	Phase 3 From 5 pm, 16 October to 5 pm, 26 October	Base energy price	Provisional correction amount 2017	Maximum full load hours per annum	Maximum subsidy period (years)	Operation must start at the latest within (years)
<b>Renewable gas from Biomass</b>	<b>Maximum base amount/phase amount (€/kWh)</b>			<b>(€/kWh)</b>				
<b>All-purpose fermentation</b> • All-purpose fermentation • Extended lifespan	0.058 0.055	0.058 0.055	0.058 0.055	0.015 0.015	0.016 0.016	8,000 8,000	12 12	4 3
<b>Fermentation of manure</b> • Fermentation/co-fermentation • Fermentation/co-fermentation, extended lifespan • Mono-fermentation ≤ 400 kW	0.064 0.063 0.064	0.074 0.063 0.078	0.074 0.063 0.088	0.015 0.015 0.015	0.016 0.016 0.016	8,000 8,000 8,000	12 12 12	4 3 4
<b>Gasification of biomass</b>	0.064	0.078	0.092	0.015	0.016	7,500	12	4
<b>Wastewater treatment or sewage treatment alone</b>	0.031	0.031	0.031	0.015	0.016	8,000	12	4



## 4. Calculation examples for Biomass

Calculation example: SDE+ contribution – Thermal conversion ≤ 100 MWe (co-generation)

Maximum base amount from phase 1	5.3 €/ct/kWh
Provisional correction amount 2017	1.5 €/ct/kWh
Provisional SDE+ 2017 contribution applied for from phase 1 at 5.3 €/ct/kWh	$5.3 - 1.5 = 3.8 \text{ €/ct/kWh} = 38 \text{ €/MWh}$
Maximum number of full load hours eligible for subsidy	7,500
Total nominal power	45 MWth
Maximum annual production eligible for subsidy for boiler with 45 MW power rating	$45 * 7,500 = 337,500 \text{ MWh}$
Electrical efficiency must be larger than 10%.	
Scenario: the annual production of electricity + heat for which a subsidy is applied for is 330,000 MWh. This is lower than the maximum annual production eligible for subsidy of 337,500 MWh. In this case, a subsidy is granted for a maximum of 330,000 MWh/annum.	
<b>Provisional annual SDE+ 2017 contribution applied for from phase 1 at 5.3 €/ct/kWh</b>	<b><math>38 * 330,000 = \text{€}12,540,000</math></b>

Calculation example: SDE+ contribution – Co-fermentation of manure, renewable gas

Maximum phase amount for phase 1 (free category)	6.4 €/ct/kWh
Maximum base amount from phase 2	7.4 €/ct/kWh
Provisional correction amount 2017	1.6 €/ct/kWh
Provisional SDE+ 2017 contribution applied for in phase 1 at 6.4 €/ct/kWh	$6.4 - 1.6 = 4.8 \text{ €/ct/kWh} = 48 \text{ €/MWh}$
Provisional SDE+ 2017 contribution applied for from phase 2 at 7.4 €/ct/kWh	$7.4 - 1.6 = 5.8 \text{ €/ct/kWh} = 58 \text{ €/MWh}$
Maximum number of full load hours eligible for subsidy	8,000
Maximum annual production eligible for subsidy an for installation with 3 MW power rating (corresponding to about 306 Nm <sup>3</sup> /hour)	$3 * 8,000 = 24,000 \text{ MWh}$
<b>Provisional annual SDE+ 2017 contribution applied for in phase 1 at 6.4 €/ct/kWh</b>	<b><math>48 * 24,000 = \text{€}1,152,000</math></b>
<b>Provisional annual SDE+ 2017 contribution applied for from phase 2 at 7.4 €/ct/kWh</b>	<b><math>58 * 24,000 = \text{€}1,392,000</math></b>



Calculation example: SDE+ contribution – Mono-fermentation ≤ 400 kW heat

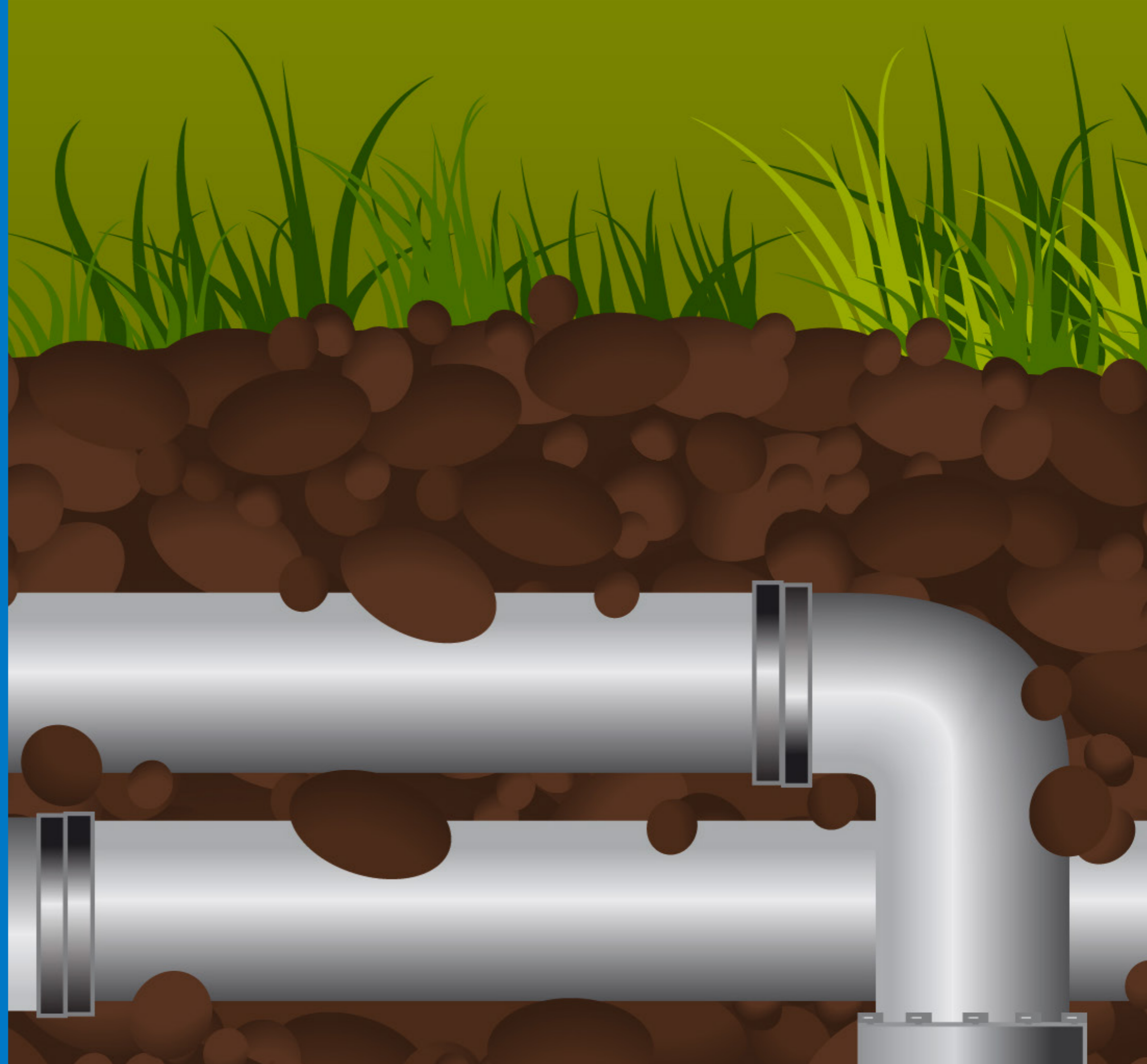
Maximum base amount from phase 2	10.2 €ct/kWh
Provisional correction amount 2017	2.3 €ct/kWh
Provisional SDE+ 2017 contribution applied for from phase 2 at 10.2 €ct/kWh	$10.2 - 2.3 = 7.9$ €ct/kWh = 79 €/MWh
Maximum number of full load hours eligible for subsidy	7,000
Maximum annual production eligible for subsidy for an installation with 0.4 MWth thermal power rating	$0.4 * 7,000 = 2,800$ MWh
Scenario: the thermal power rating of the installation for which you have applied for a subsidy is 0.4 MWth, and the installation is expected to run for 7,500 hours per annum at full load. The annual production of your installation is then 3,000 MWh. This is higher than the maximum annual production eligible for subsidy. In this case, a subsidy is granted for a maximum of 2,800 MWh/annum.	
<b>Provisional annual SDE+ 2017 contribution applied for from phase 2 at 10.2 €ct/kWh</b>	<b><math>79 * 2,800 = €221,200</math></b>
If your business case shows that your project is profitable with less than the maximum possible subsidy, you have the option of applying for a lower subsidy. As all projects for which a subsidy is applied for compete on the basis of the sum applied for, applying for a lower subsidy gives you a better chance of having your application approved. Your project therefore has an advantage compared with less cost-effective projects.	
<b>Subsidy applied for in phase 2 (free category)</b>	<b>10.0 €ct/kWh</b>
Provisional correction amount 2017	2.3 €ct/kWh
Provisional SDE+ 2017 contribution applied for in phase 2 at 10.0 €ct/kWh	$10.0 - 2.3 = 6.7$ €ct/kWh = 67 €/MWh
Maximum number of full load hours eligible for subsidy	7,000
Maximum annual production eligible for subsidy for an installation with 0.4 MWth thermal power rating	$0.4 * 7,000 = 2,800$ MWh
<b>Provisional annual SDE+ 2017 contribution applied for in phase 2 at 10.0 €ct/kWh</b>	<b><math>67 * 2,800 = €187,600</math></b>

The “[Calculation](#)” page of the SDE+ website describes (Dutch only) how the SDE+ subsidy is determined and how much is paid out. The SDE+ contribution for 2017 indicated here is a provisional contribution, based on the provisional correction amount for 2017. The correction amount will be finalised in the calendar year following the year of production, followed by an adjustment based on advance sums already paid. The correction amount (provisional and final) is re-established each year, on the basis of the evolution of the energy price. The base or phase amount applied for applies to the entire duration of the SDE+ subsidy.



GEO THERMAL

*You can apply for 2017 SDE+ subsidies for installations that use geothermal heat as an energy source.*





## 1. Which installations qualify for SDE+ subsidy in 2017?

The 2017 SDE+ subsidy scheme contains the following four geothermal categories:

- geothermal heat from a depth of at least 500 metres;
- geothermal heat from a depth of at least 3,500 metres;
- geothermal heat from a depth of at least 500 metres, where an existing oil or gas well is used for one or both wells of the doublet;
- geothermal heat from a depth of at least 500 metres, where the production installation is expanded by drilling an extra well.

## 2. Features and changes since 2016

There will be no CHP Geothermal category in 2017. The category “Geothermal heat from a depth of at least 500 metres” was expanded in 2016 to include the use of existing oil and gas wells and the drilling of an extra well in existing geothermal heat projects.

The nominal capacity for geothermal must be determined at a probability of at least 50% (P50).

### **Geological survey**

In order to obtain a better assessment of the energy production, a geological survey will be requested in support of the budget claim. The geological survey must comply with the “SDE+ Geological Survey Model” (*Model Geologisch Onderzoek SDE+*). This survey must be submitted along with your application. The “RNES Geothermal Geological Survey report” (*Geologisch Onderzoek RNES Aardwarmte*) may also be used for this. The geological survey models are only available in Dutch.

### **Exploration permit**

When applying for a subsidy in the Geothermal category, an exploration permit must be issued as required by the Dutch Mining Act (*Mijnbouwwet*). This permit must be obtained before you apply for a SDE+ subsidy and should be included with your subsidy application.





### 3. Phasing and rates for Geothermal

2017	Phase 1 From 9 am, 3 October	Phase 2 From 5 pm, 9 October	Phase 3 From 5 pm, 16 October to 5 pm, 26 October	Base energy price	Provisional correction amount 2017	Maximum full load hours per annum	Maximum subsidy period (years)	Operation must start at the latest within (years)
<b>Geothermal</b>	Maximum base amount/phase amount (€/kWh)			(€/kWh)				
<b>Geothermal heat</b>								
• ≥ 500 m deep	0.053	0.053	0.053	0.012	0.012	5,500	15	4
• ≥ 3,500 m deep	0.057	0.057	0.057	0.012	0.012	7,000	15	4
• Conversion of existing oil and/or gas wells ≥ 500 m deep	0.053	0.053	0.053	0.012	0.012	5,500	15	4
• Expansion of production installation ≥ 500 m deep	0.053	0.053	0.053	0.012	0.012	5,500	15	4

### 4. Calculation example for Geothermal

Calculation example: SDE+ contribution – Geothermal heat at a depth of ≥ 3,500 metres

Maximum base amount from phase 1	5.7 €/ct/kWh
Provisional correction amount 2017	1.2 €/ct/kWh
Provisional SDE+ 2017 contribution applied for from phase 1 at 5.7 €/ct/kWh	$5.7 - 1.2 = 4.5$ €/ct/kWh = 45 €/MWh
Maximum number of full load hours eligible for subsidy	7,000
Annual production of an installation consisting of 1 doublet with a 20 MW power rating	$20 * 7,000 = 140,000$ MWh
<b>Provisional annual SDE+ 2017 contribution applied for from phase 1 at 5.7 €/ct/kWh</b>	<b><math>45 * 140,000 = €6,300,000</math></b>

The “[Calculation](#)” page of the SDE+ website describes (Dutch only) how the SDE+ subsidy is determined and how much is paid out. The SDE+ contribution for 2017 indicated here is a provisional contribution, based on the provisional correction amount for 2017. The correction amount will be finalised in the calendar year following the year of production, followed by an adjustment based on advance sums already paid. The correction amount (provisional and final) is re-established each year, on the basis of the evolution of the energy price. The base or phase amount applied for applies to the entire duration of the SDE+ subsidy.



## HYDRO

*In 2017, the SDE+ will also subsidise installations that generate energy from hydro power, free flowing energy and osmosis. The category “Free flowing energy” also includes wave energy.*



## 1. Which installations qualify for SDE+ subsidy in 2017?

### Hydro

The following are eligible for subsidy:

- new hydroelectric power stations with a drop of  $\geq 50$  cm; and
- renovation of existing hydroelectric power stations with new turbines and a drop of  $\geq 50$  cm.

### Free flowing energy

Subsidy is available for turbines that use tidal power with a drop of  $< 50$  cm, for example. In all cases, this must involve energy derived from water that is not specially pumped upwards for the purpose of generating energy.

### Wave energy

Under the SDE+ 2017, installations that convert wave energy into renewable electricity are eligible for subsidy.

### Osmosis

You can apply for a subsidy for an installation that generates renewable electricity by means of the difference between the salt concentrations of two bodies of water.

## 2. Features and changes since 2016

As of 2016, there is a requirement for the category “renovation of existing hydroelectric power stations” that all turbines for which the subsidy is requested must be new ones placed in existing engineering structures. The other components do not have to be new.

Wave-energy subsidies can be submitted under the “Free-flowing energy” category.

## 3. Phasing and rates for Hydro

2017	Phase 1 From 9 am, 3 October	Phase 2 From 5 pm, 9 October	Phase 3 From 5 pm, 16 October to 5 pm, 26 October	Base energy price	Provisional correction amount 2017	Maximum full load hours per annum	Maximum subsidy period (years)	Operation must start at the latest within (years)
Hydro	Maximum base amount/phase amount (€/kWh)			(€/kWh)				
<b>Hydroelectric power station</b> • New, drop of $\geq 50$ cm • Renovation with new turbine, drop of $\geq 50$ cm	0.090 0.090	0.110 0.100	0.130* 0.100	0.031 0.031	0.032 0.032	5,700 2,600	15 15	4 4
<b>Free flowing energy, drop of <math>&lt; 50</math> cm and wave energy</b>	0.090	0.110	0.130*	0.031	0.032	3,700	15	4
<b>Osmosis</b>	0.090	0.110	0.130*	0.031	0.032	8,000	15	4

\* This is the maximum base amount for renewable electricity.



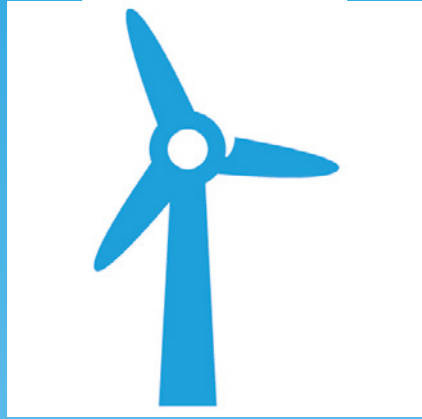
## 4. Calculation example for Hydro

Calculation example: SDE+ contribution – Renovation of 12 MWe hydroelectric power plant, drop of  $\geq 50$  cm

Maximum phase amount for phase 1 (free category)	9.0 €ct/kWh
Maximum base amount from phase 2	10.0 €ct/kWh
Provisional correction amount 2017	3.2 €ct/kWh
Provisional SDE+ 2017 contribution applied for in phase 1 at 9.0 €ct/kWh	$9.0 - 3.2 = 5.8$ €ct/kWh = 58 €/MWh
Provisional SDE+ 2017 contribution applied for from phase 2 at 10.0 €ct/kWh	$10.0 - 3.2 = 6.8$ €ct/kWh = 68 €/MWh
Maximum number of full load hours eligible for subsidy	2,600
Maximum annual production for renovated 12 MWe hydroelectric power plant	$12 * 2,600 = 31,200$ MWh
<b>Provisional annual SDE+ 2017 contribution applied for in phase 1 at 9.0 €ct/kWh</b>	<b><math>58 * 31,200 = \text{€}1,809,600</math></b>
<b>Provisional annual SDE+ 2017 contribution applied for from phase 2 at 10.0 €ct/kWh</b>	<b><math>68 * 31,200 = \text{€}2,121,600</math></b>

The “[Calculation](#)” page of the SDE+ website describes (Dutch only) how the SDE+ subsidy is determined and how much is paid out. The SDE+ contribution for 2017 indicated here is a provisional contribution, based on the provisional correction amount for 2017. The correction amount will be finalised in the calendar year following the year of production, followed by an adjustment based on advance sums already paid.

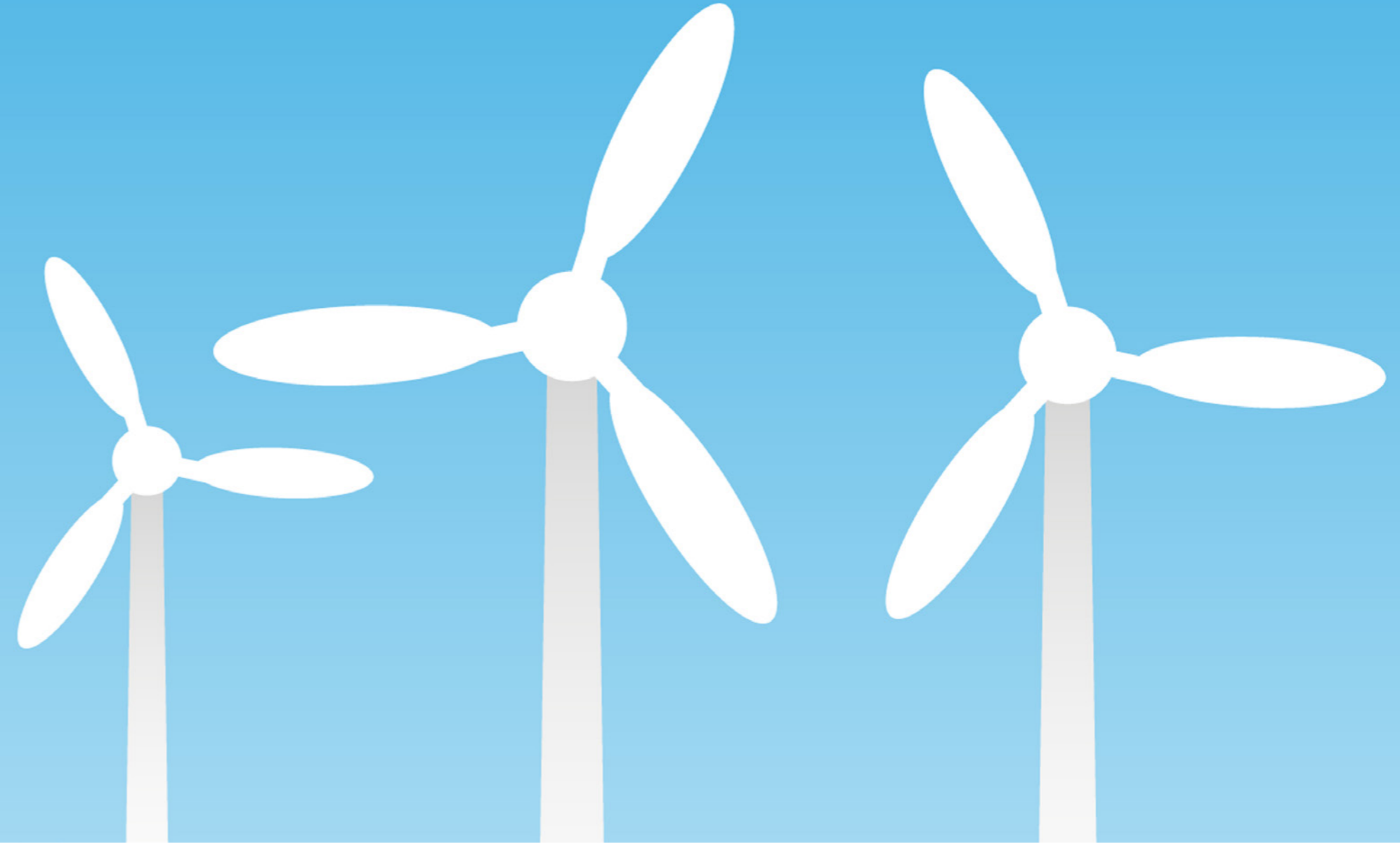
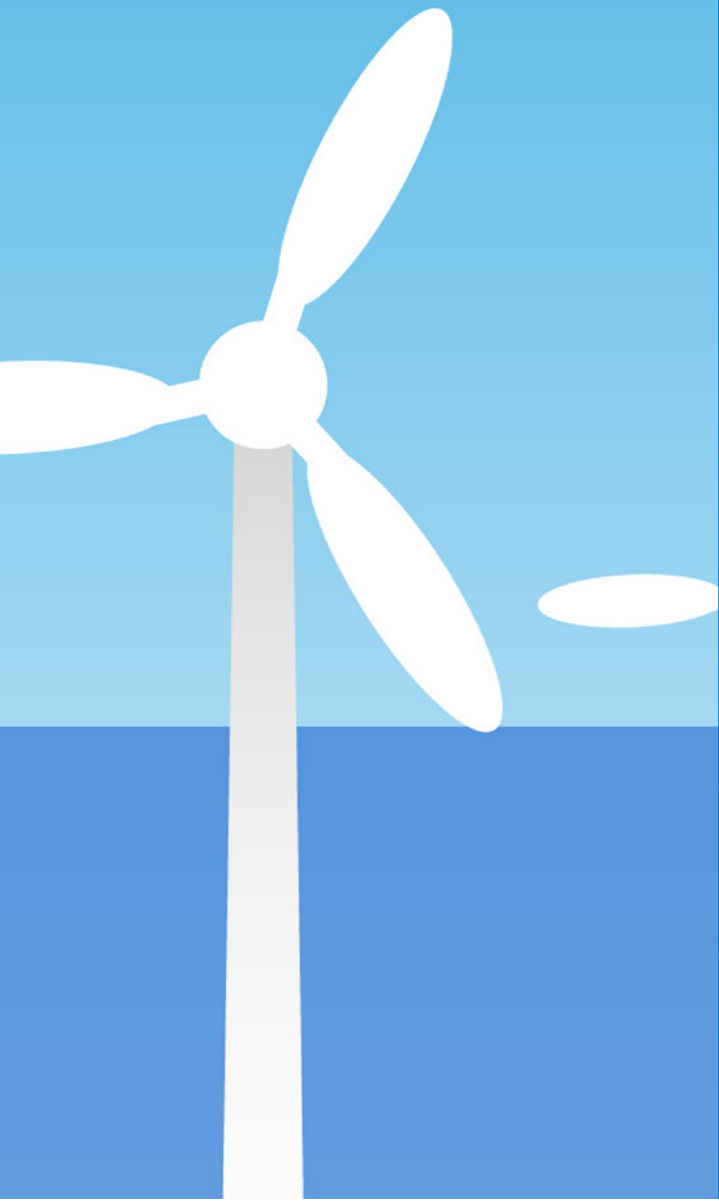
The correction amount (provisional and final) is re-established each year, on the basis of the evolution of the energy price. The base or phase amount applied for applies to the entire duration of the SDE+ subsidy.



WIND

You can apply for 2017 SDE+ subsidies for wind turbines for the categories “Onshore wind”, “Wind on primary flood defences”, and “Wind on lake”.

Separate tender procedures apply to “Offshore wind”.





## 1. Which installations qualify for SDE+ subsidy in 2017?

SDE+ 2017 includes the following three subsidy categories for wind energy:

- Onshore wind;
- Wind on primary flood defences;
- Wind on lake.

## 2. Features and changes since 2016

### Wind map

Each Dutch municipality is assigned to one of the following four wind speed categories:

- $\geq 8.0$  m/s;
- $\geq 7.5$  and  $< 8.0$  m/s;
- $\geq 7.0$  and  $< 7.5$  m/s;
- $< 7.0$  m/s.

The map of [“Wind speeds for individual Dutch municipalities”](#) shows the average wind speed for each Dutch municipality and is based on a wind map produced by the Royal Dutch Meteorological Institute KNMI. The map has been updated. The municipal divisions will apply to SDE+ 2017 as of 1 January 2017. Due to large differences in wind speed, the municipality of Rotterdam is subdivided upto neighbourhood level in the SDE+ round of applications for autumn 2017. A separate base amount has been calculated for each wind speed category. It follows that the maximum subsidy you can apply for depends on the municipality where your wind turbine is located.

### Wind on primary flood defences

Under the category “Wind on primary flood defences”, subsidy applications can be submitted for wind turbines located within the protection zones of category-B interconnecting flood defences, or within the core defence zone, i.e. wind turbines on the waterside of primary flood defences bordering the North Sea, the Western and Eastern Scheldt Estuary, the Wadden Sea, the Dollard or the Ems (the ocean flood defences). The map titled [“Wind on primary flood defences, SDE+”](#) gives an overview of these water defences.

### Wind on lake

Subsidy can also be requested for a wind turbine with the foundation entirely located in the water of a lake with an area of at least 1 km<sup>2</sup>. The midpoint of the foundation must be at least 25 m from the shore of the lake. This ruling applies, for example, to the IJsselmeer and the lakes in the Dutch province of Zeeland.

### Replacement of wind turbines

Subsidies for the replacement of wind turbines are only available under the following conditions:

- The nominal and actual power ratings of each new wind turbine are at least 1 MW more than those of the old one; or
- The wind turbine to be replaced has been in use for 15 years at the relevant location at the time of replacement, and has been in use for at least 13 years when the subsidy is applied for.

### Windviewer and wind report

A wind report, including a calculation of the wind energy yield, must be included as part of the feasibility study for wind projects. The maximum average wind speed used in such calculations as of 2016 is derived from the Windviewer, which gives the average wind speed at any height between 20 and 160 metres for any location in the Netherlands. This information is based on wind data collected by the Royal Dutch Meteorological Institute KNMI in the period 2004 – 2013. The introduction of the SDE+ Windviewer removes the requirement that the above-mentioned wind reports must be prepared by an independent agency.

### No “Offshore wind” in SDE+ Autumn 2017

Separate tender procedures apply to [“Offshore wind”](#).



### 3. Phasing and rates for Wind

2017	Phase 1 From 9 am, 3 October	Phase 2 From 5 pm, 9 October	Phase 3 From 5 pm, 16 October to 5 pm, 26 October	Base energy price	Provisional correction amount 2017	Maximum full load hours per annum	Maximum subsidy period (years)	Operation must start at the latest within (years)
<b>Wind</b>	<b>Maximum base amount/phase amount (€/kWh)</b>			<b>(€/kWh)</b>				
<b>Onshore wind</b>								
- ≥ 8.0 m/s	0.064	0.064	0.064	0.025	0.028	*	15	4
- ≥ 7.5 and < 8.0 m/s	0.070	0.070	0.070	0.025	0.028	*	15	4
- ≥ 7.0 and < 7.5 m/s	0.075	0.075	0.075	0.025	0.028	*	15	4
- < 7.0 m/s	0.085	0.085	0.085	0.025	0.028	*	15	4
<b>Wind on primary flood defences</b>								
- ≥ 8.0 m/s	0.069	0.069	0.069	0.025	0.028	*	15	4
- ≥ 7.5 and < 8.0 m/s	0.075	0.075	0.075	0.025	0.028	*	15	4
- ≥ 7.0 and < 7.5 m/s	0.080	0.080	0.080	0.025	0.028	*	15	4
- < 7.0 m/s	0.090	0.091	0.091	0.025	0.028	*	15	4
<b>Wind on lake, water ≥ 1 km<sup>2</sup></b>	0.090	0.104	0.104	0.025	0.028	*	15	4

\* Net P50-value of full load hours taken from applicant's wind report. This value is determined on an individual basis for each project.



## 4. Calculation example for Wind

Calculation example: SDE+ contribution – Onshore wind < 7.0 m/s

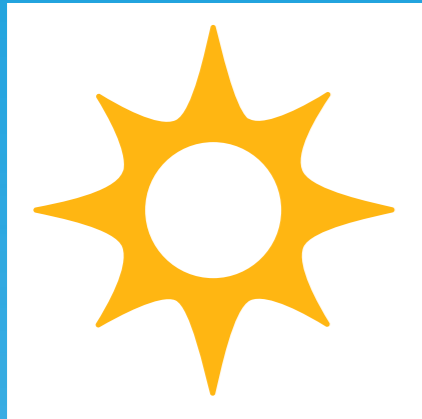
For example, a project in the municipality of Amersfoort

Subsidy applied for in phase 1 (free category)	8.0 €ct/kWh
Maximum base amount from phase 1	8.5 €ct/kWh
Maximum number of full load hours eligible for subsidy (the net P50-value taken from the applicant's wind report. This value is determined on an individual basis for each project.)	1,920
Provisional correction amount 2017	2.8 €ct/kWh
Provisional SDE+ 2017 contribution applied for in phase 1 at 8.0 €ct/kWh	$8.0 - 2.8 = 5.2$ €ct/kWh = 52 €/MWh
Provisional SDE+ 2017 contribution applied for from phase 1 at 8.5 €ct/kWh	$8.5 - 2.8 = 5.7$ €ct/kWh = 57 €/MWh
Maximum annual production eligible for subsidy for 3 MW installation	$3 * 1,920 = 5,760$ MWh
<b>Provisional annual SDE+ 2017 contribution applied for in phase 1 at 8.0 €ct/kWh</b>	<b><math>52 * 5,760 = €299,520</math></b>
<b>Provisional annual SDE+ 2017 contribution applied for from phase 1 at 8.5 €ct/kWh</b>	<b><math>57 * 5,760 = €328,320</math></b>

The “[Calculation](#)” page of the SDE+ website describes (Dutch only) how the SDE+ subsidy is determined and how much is paid out. The SDE+ contribution for 2017 indicated here is a provisional contribution, based on the provisional correction amount for 2017. The correction amount will be finalised in the calendar year following the year of production, followed by an adjustment based on advance sums already paid.

The correction amount (provisional and final) is re-established each year, on the basis of the evolution of the energy price. The base or phase amount applied for applies to the entire duration of the SDE+ subsidy.





## SOLAR

*2017 SDE+ subsidies are available for the production of electricity and heat from solar technology. The “Solar PV from 15 kWp” categories are only open for installations connected to a large-scale energy connection. Subsidies for the “Solar thermal” category are available for installations with covered solar collectors and a thermal capacity of  $\geq 140$  kW.*





## 1. Which installations qualify for SDE+ subsidy in 2017?

### Renewable electricity

Subsidies are available for photovoltaic solar panels (Solar PV) with a capacity of  $\geq 15$  kWp and a large-scale energy connection to the grid.

### Renewable heat

You can apply for a subsidy for “Solar collectors with a total thermal capacity of  $\geq 140$  kW”, as long as all the collectors used are covered with a translucent layer.

## 2. Features and changes since spring 2017

### Solar PV

In SDE+ Autumn 2017 you can apply for subsidy for two Solar PV categories. Solar PV with a capacity  $\geq 15$  kWp and  $< 1$  MWp and the category Solar PV with a capacity  $\geq 1$  MWp. The period within operation must start at the latest for Solar PV with a capacity  $\geq 15$  kWp and  $< 1$  MWp has been changed from three years into a year and a half. The Solar PV categories are once again opened for installations connected to a large-scale energy connection (i.e. a connection to the electricity grid with a rating of more than  $3 * 80$  A).

The costs associated with the acquisition of an installation suitable for large-scale energy connection may be high. The grid operator will be able to provide further information on these costs.

If you are submitting an application and are not the owner of the intended location for the production installation, you will be obliged to submit a declaration from the owner with your application. In this declaration, the owner gives his/her authorisation to have the production installation built and operated at the intended location. Producers with small-scale energy connections (smaller than or equal to  $3 * 80$  A) may apply under the netting scheme (salderingsregeling), the Energy Investment Allowance (EIA) or Energy Conservation and Sustainable Energy for Sports Premises (Energiebesparing en duurzame energie sportaccommodaties, EDS).

### Feasibility study

If you are applying for a subsidy for an installation with a rating of more than 500 kWp, you must perform a feasibility study and include the results of this study in your application. Such a feasibility study is also required if you are applying for a subsidy for several installations with a combined total power rating of more than 500 kWp (0.5 MWp) in the same round of applications. If the total capacity of your production installations for any single round exceeds 500 kWp (0.5 MW), make sure to include a feasibility study for every application. The feasibility study must contain a substantiation of the equity capital for the total number of projects in the same round of applications for the same applicant.

### Solar thermal

SDE+ 2017 subsidies are available in the “Solar thermal” category exclusively for installations with “covered” solar collectors with a total thermal capacity  $\geq 140$  kW. Capacity is calculated based on a thermal capacity of 0.7 kW per square metre of solar collector aperture surface. Smaller systems are subject to the Sustainable Energy Investment Grant (ISDE) scheme (Dutch only).

### Environmental permit

Do you place the Solar-installation on a new build building? Then add in the environmental permit granted for the building. An environmental permit is usually required for solar installations in a field set-up. If no environmental permit is required, you must enclose the relevant documentation to confirm this.



### 3. Phasing and rates for Solar

2017	Phase 1 From 9 am, 3 October	Phase 2 From 5 pm, 9 October	Phase 3 From 5 pm, 16 October to 5 pm, 26 October	Base energy price	Provisional correction amount 2017	Maximum full load hours per annum	Maximum subsidy period (years)	Operation must start at the latest within (years)
<b>Solar</b>	Maximum base amount/phase amount (€/kWh)			(€/kWh)				
<b>Solar PV</b> connection > 3*80 A capacity: ≥ 15 kWp and < 1 MWp ≥ 1 MWp	0.090 0.090	0.110 0.110	0.117 0.117	0.026 0.026	0.033 0.033	950 950	15 15	1.5 3
<b>Solar thermal</b> thermal capacity: ≥ 140 kW	0.090	0.095	0.095	0.028	0.029	700	15	3



## 4. Calculation examples for Solar

Calculation example: SDE+ contribution – Solar PV  $\geq 15$  kWp and  $< 1$  MWp (electricity)

Maximum phase amount for phase 1 (free category)	9.0 €ct/kWh
Maximum base amount in phase 3	11.7 €ct/kWh
Provisional correction amount 2017	3.3 €ct/kWh
Provisional SDE+ 2017 contribution applied for in phase 1 at 9.0 €ct/kWh	$9.0 - 3.3 = 5.7$ €ct/kWh = 57 €/MWh
Provisional SDE+ 2017 contribution applied for in phase 3 at 11.7 €ct/kWh	$11.7 - 3.3 = 8.4$ €ct/kWh = 84 €/MWh
Maximum number of full load hours eligible for subsidy#	950
Maximum annual production eligible for subsidy for 400 kWp installation#	$400 * 950 = 380,000$ kWh = 380 MWh
<b>Provisional annual SDE+ 2017 contribution applied for in phase 1 at 9.0 €ct/kWh</b>	<b><math>57 * 380 = \text{€}21,660</math></b>
<b>Provisional annual SDE+ 2017 contribution applied for in phase 3 at 11.7 €ct/kWh</b>	<b><math>84 * 380 = \text{€}31,920</math></b>

# You do not need to give a production estimate (capacity \* hours at full load) when making a subsidy application for “Solar PV”. The Netherlands Enterprise Agency will base its decision on the assumption that the maximum number of full load hours eligible for subsidy is 950.

The “[Calculation](#)” page of the SDE+ website describes (Dutch only) how the SDE+ subsidy is determined and how much is paid out. The SDE+ contribution for 2017 indicated here is a provisional contribution, based on the provisional correction amount for 2017. The correction amount will be finalised in the calendar year following the year of production, followed by an adjustment based on advance sums already paid.

The correction amount (provisional and final) is re-established each year, on the basis of the evolution of the energy price. The base or phase amount applied for applies to the entire duration of the SDE+ subsidy.

Calculation example: SDE+ contribution – Solar thermal with a total thermal capacity of  $\geq 140$  kW

Maximum phase amount for phase 1 (free category)	9.0 €ct/kWh
Maximum base amount from phase 2	9.5 €ct/kWh
Provisional correction amount 2017	2.9 €ct/kWh
Provisional SDE+ 2017 contribution applied for in phase 1 at 9.0 €ct/kWh	$9.0 - 2.9 = 6.1$ €ct/kWh = 61 €/MWh
Provisional SDE+ 2017 contribution applied for from phase 2 at 9.5 €ct/kWh	$9.5 - 2.9 = 6.6$ €ct/kWh = 66 €/MWh
Maximum number of full load hours eligible for subsidy#	700
Total thermal capacity of an installation with an aperture surface area of 200 m <sup>2</sup>	$200 * 0.7 = 140$ kW
Maximum annual production eligible for subsidy for an installation with thermal capacity of 140 kW#	$140 * 700 = 98,000$ kWh = 98 MWh
<b>Provisional annual SDE+ 2017 contribution applied for in phase 1 at 9.0 €ct/kWh</b>	<b><math>61 * 98 = \text{€}5,978</math></b>
<b>Provisional annual SDE+ 2017 contribution applied for from phase 2 at 9.5 €ct/kWh</b>	<b><math>66 * 98 = \text{€}6,468</math></b>

# When applying for a subsidy for Solar thermal, you must fill in the aperture area. The thermal capacity of the installation in kW is equal to the total aperture surface area in m<sup>2</sup> multiplied by 0.7. You do not need to give a production estimate (= capacity \* hours at full load).

# Autumn 2017 SDE+ applications open: 3 – 26 October

**If you wish to apply for an SDE+ subsidy, applications can be submitted quickly and easily via the online eLoket of the Netherlands Enterprise Agency.**

**The SDE+ round of applications for autumn 2017 runs from 9 am on 3 October to 5 pm on 26 October 2017. This round is divided into three phases, and the phase amount increases for each phase.**

## **1. Sign in with eLoket (e-Service)**

You must identify yourself with a user name and password before you can use eLoket. Businesses and organisations can identify themselves with *eHerkenning* (*eRecognition*). Private individuals have to use the DigiD service for that purpose.

## **2. Create a profile**

If you are using eLoket for the first time, you will need to create a profile first. Here, enter your contact details once, along with the Chamber of Commerce number or the citizen service number (*BSN-nummer*) of the identification used. You must also enter your details as intermediary if you want to apply on behalf of another party.

## **3. Create a draft application**

Log in by clicking [“Apply for SDE+”](#) (*SDE+ aanvragen*) on the SDE+ website. This brings you directly to the screen containing the application forms menu. If you log in via the start page of eLoket, you will find the application form for the SDE+ under the *“New application”* (*Nieuwe aanvraag*) tab.

In the forms catalogue that is then displayed, click on *“SDE+ 2017”* (*Stimulerend Duurzame Energieproductie 2017 - SDE+*). In the *“Select theme”* (*Thema selecteren*) tab, you need to specify the production installation category you would like to apply for. Under the *“Create form”* (*Formulier aanmaken*) tab, you will need to answer several questions, after which the correct form will be created for you.

## **4. Filling in the application form**

You are then directed to the application form containing the questions relevant for your application. Before moving on to the next tab, you can verify your input with the *“Verification”* (*Controleren*) button. You will be notified if any information is missing or incorrect. You can add appendices in the last tab of the application form. Mandatory appendices are indicated with an asterisk (\*). Check the entire application for errors before submitting it. If you still get error messages, navigate to the specified tab to correct your input. You can submit your application from 9 am on 3 October 2017.

You can save your draft application at any time. To submit your application at a later time, sign in again and follow the steps under *“5”* in order to submit your application.

## **5. Submission**

To submit a correctly completed form, click on *“To submission”* (*Naar verzenden*) in the *“Verification”* (*Controleren*) tab. Here, verify once more that all the information is accurate. All questions and answers appear in sequence on the screen.

Indicate which phase and amount per MWh (1 MWh = 1000 kWh) you are submitting the application for; then tick *“Declared and signed”* (*Verklaring en ondertekening*). Next, perform the final submission of the application by clicking on *“Sign and submit”* (*Ondertekenen en verzenden*). You will receive a message of confirmation via the e-mail address indicated in your profile.

## **6. Retrieval**

Your application form will be saved automatically when you navigate to a new tab. You can also choose to save the information at any other point. Saved applications can be found in *“My overview”* (*Mijn overzicht*).

Submitted applications are assigned a project number.

This number can be used in any correspondence relating to your application.

### **Do you not yet have an eHerkenning or DigiD?**

Click on the link below to request one. Please note that this process will likely take several days. An eHerkenning trust level 1 will be required when applying for the SDE+ subsidy.

[www.eherkenning.nl](http://www.eherkenning.nl) and [www.digid.nl](http://www.digid.nl)

### **Bundled applications for wind and green gas hubs**

Application bundling is possible for applications in the wind category and applications for production installations that are part of a green gas hub. This can be useful when the joint applicants only wish to proceed with a project if all applications in the bundle are honoured.

If, one day, the budget claim of the applied subsidies exceeds the available budget, applications will be classified in order of the amounts of subsidy applied for. In the case of a bundled application, the highest amount of the applications in the bundle will apply. If lots are drawn amongst applications with an equal amount, bundles will be considered as a single application.

### **Preparing your application: which appendices do you need to include?**

The SDE+ 2017 application form indicates which appendices are required in each category.

### **Feasibility study**

From a nominal requested capacity of 0.5 MW, or 500 kWp, it is mandatory to include a feasibility study (see Downloads, in Dutch only) on the project with the application. Compulsory elements of the feasibility study include: a clear financial plan, proof of your equity, an operation calculation, and a detailed time frame regarding the commissioning of the production installation. Equity capital figures must be substantiated with documents demonstrating that the necessary resources (financial and otherwise) are available, such as annual financial accounts or a profit and loss statement.

For the sake of completeness, your application should always provide information on the following aspects:

- *the applicant's own equity capital; and*
- *the capital being invested by third parties or one or more shareholders.*

If the applicant's own equity capital represents less than 20% of the total investment, a statement by a financial adviser will also be required.

The equity capital sourced from third parties or one or more shareholders must be secured by means of a contract, including data on these parties' own equity capital.

Extra details may be requested depending on the project. Information on the feasibility study can be found on the SDE+ website (only available in Dutch).

Tip: make use of the updated "SDE+ Feasibility Study Template- August 2017" (Model *Haalbaarheidsstudie SDE+ augustus 2017, Dutch only*).

Since the SDE+ round of applications for autumn 2017, such a feasibility study is also required if you are applying for a subsidy for several installations with a total power rating of more than 0.5 MW (500 kWp) in the same round of applications. Make sure to include a feasibility study for every application. The feasibility study must contain a substantiation of the equity capital for the total number of projects in the same round of applications for the same applicant.

### **Wind report**

If you are applying under the "Wind (onshore, lake or primary flood defences)" category, you must also submit a wind report containing a wind energy yield calculation. Use the Windviewer to determine the maximum average wind speed.

### **Geological survey**

If you are submitting an application in the Geothermal category, you will require a geological survey. This survey should be submitted along with your application. The geological survey must comply with the "SDE+ Geological Survey Model" (Model *Geologisch Onderzoek SDE+*). The "RNES Geothermal Geological Survey report" (Geologisch Onderzoek *RNES Aardwarmte*) may also be used for this purpose. The geological survey models are only available in Dutch.

### **Permits required**

In most cases, one or more permits will be required for production installations. When you submit your application, these permits must already have been issued by the competent authorities. As an applicant, you are expected to be aware of the permit requirements for the production installation for which you are applying for a subsidy.

In accordance with the “SDE Decision”, the application form asks whether permits are required for the production installation.

For example:

- permits with regard to the Environmental Act (General Provisions) (*Wet algemene bepalingen omgevingsrecht*);
- permits on the basis of Chapter 6, Paragraph 6, of the Water Decree (Water permit); and/or
- permits with regard to the Mining Act (*Mijnbouwwet*).

You should indicate on the form whether or not the permits are required. If you answer a question with “yes”, you must include this/these permit(s) in your application.

If environmental permits are required, you have to submit the relevant permit(s) plus the application forms for the permit(s) with your subsidy application. For solar installations only the permits, if necessary are required.

### **Permission from the owner**

Is someone else the owner of the intended location for the production installation? Under the SDE+, you will need prior permission from the owner of the intended location or, at the latest, you need to obtain permission at the moment of the application.

In the application form, you must indicate whether you are the owner of the intended location. If you are not, you must include a formal declaration of permission from the owner of the location with your application. In this declaration, the owner gives his/her authorisation to have the production installation built and operated at the intended location. If there are several owners, you have to add the formal declaration of permission from all owners to your application.

## Points of interest

- **To be eligible for an SDE+ subsidy, your application must be completed in full. Make sure your application includes proper justification for your project, a thorough feasibility study and all necessary permits and appendices and that you have filled in the digital application form completely.**
- You can submit your subsidy application between 9 am on 3 October and 5 pm on 26 October 2017.
- During the above-mentioned application period, you can only submit one application per production installation category and per address where the production installation will be built.
- The amount of subsidy applied for can vary. The maximum base amount depends on the technology used. You can also apply for a subsidy at a lower amount, in what is known as the “free category”.
- The Netherlands Enterprise Agency will process the applications in the order of submission (i.e. on a first-come, first-served basis). Applications will be classified in order of the amount of subsidy applied for in the event that more subsidies are applied for on one day than is available in terms of the SDE+ budget. In such a case, the application for the lowest amount will be ranked first in the classification system. If the budget limit falls between applications with an equal amount, lots will be drawn amongst the applications.
- For the allocation of the subsidy budget, applications received at or after 5 pm will be considered as having been received on the next working day.
- Applications for wind categories and applications for production installations that form a part of a renewable gas hub can be submitted as a bundle. More information on bundled applications in the eLoket can be found on the [SDE+ website](#) under the “Apply for SDE+” (*Aanvragen voor SDE+*) tab (in Dutch only).

## SDE+ grants

### Implementation agreement and bank guarantee

If you are to be granted a subsidy of €400 million or more for your project, the grant will be subject to a suspensory condition. Within two weeks of the grant being issued, you must send a signed implementation agreement to RVO.nl. This agreement (in accordance with the implementation agreement as included in the appendix to the Allocation Regulations for SDE categories in Autumn 2017) can be found on the [website](#) under the “After your application” (*Na uw aanvraag*) tab.

The bank guarantee required under the implementation agreement must be submitted to RVO.nl within four weeks after sending the grant. Sample bank guarantees have been included in the Allocation Regulations for SDE categories in Autumn 2017, and can also be found on the [website](#).

Further information: see the Implementation Agreement FAQ on the [website](#).

## Receiving the SDE+

Have you been granted SDE+ subsidy? If so, several more steps are required before you will actually receive it:

- Within one year of being allocated your subsidy, you must submit copies of your job assignments that outline the components of the production installation and the contracts issued for the construction of this facility. You don’t have to submit these copies for the category Solar PV with a capacity  $\geq 15$  kWp and  $< 1$  MWp, because of the short implementation period of a year and a half.
- The project must be completed and the production installation put into service.
- You must register with a certifying authority: CertiQ for renewable electricity and heat and Vertogas for renewable gas.
- The network operator (or in case of heat, the metering company) should establish you as a producer of renewable energy.

Once these steps have been completed, you will receive a monthly advance payment. An annual correction will be applied, based on the actual energy price and the certified meter readings received by the Netherlands Enterprise Agency. See also the [SDE+ step-by-step instructions](#).



# Cornerstones of the SDE+

## **1. One budget for all categories taken together**

One subsidy budget has been set for all the categories together. For the autumn 2017 round of applications, €6 billion has been made available to support projects. Applications will be classified in order of the amount of subsidy applied for if more subsidies are received one day than there is budget for. In such a case, the application for the lowest amount will be ranked first in the classification system. If the budget limit falls between applications with an equal amount, lots will be drawn amongst these applications.

## **2. A phased release of funds**

SDE+ subsidies are released in phases. There are three phases during the period between 9 am on 3 October and 5 pm on 26 October. Each phase has a maximum phase amount, rising from 9 €/kWh (6.4 €/kWh for renewable gas) in phase 1 to 13 €/kWh (9.2 €/kWh for renewable gas) in phase 3. There is a maximum base amount for each technology, above which no subsidy is granted. Subsidies for cost-effective technologies with a maximum phase amount less than or equal to 9 €/kWh may be applied for in phase 1. There is a greater chance that budget will be available for these phase 1 applications than for technologies with a higher maximum base amount.





















## **3. A maximum base amount per production installation**

The maximum base amount for SDE+ subsidies in 2017 is 13 €/kWh (9.2 €/kWh for renewable gas). Technologies that are able to produce renewable energy for this amount or lower may apply for subsidy.

## **4. A free category**

You can also apply for a lower subsidy than the maximum base amount for the technology in question. Such applications fall within the so-called “free category”. Renewable energy producers or those aiming to be renewable energy producers can apply for subsidies in this category for amounts equal to multiples of a tenth of a eurocent per kilowatt-hour. This allows applicants to tailor their subsidy application more closely to their business case. The amount of subsidy applied for in the “free category” is lower than the maximum phase amount and higher than the base energy price.

















**Table: SDE+ Autumn 2017 base amounts**

Category	Renewable energy form	Maximum base amount (€/kWh)	Base energy price (€/kWh)	Provisional correction amount 2017 (€/kWh)	Full load hours per annum
<b>Phase 1 – from 9 am, 3 October</b>					
 Wastewater treatment / sewage treatment – renewable gas only	gas	0.031	0.015	0.016	8,000
 Solid or liquid biomass boiler ≥ 5 MWth	heat	0.043	0.012	0.012	7,000
 Sewage treatment – thermophilic fermentation of secondary sludge	CHP	0.048	0.023	0.024	5,729
 Geothermal heat, ≥ 500 metres deep	heat	0.053	0.012	0.012	5,500
 Geothermal heat, conversion of existing oil and/or gas wells, ≥ 500 m deep	heat	0.053	0.012	0.012	5,500
 Geothermal heat, expansion of production installation, ≥ 500 m deep	heat	0.053	0.012	0.012	5,500
 Thermal conversion of biomass ≤ 100 MWe	CHP	0.053	0.014	0.015	7,500
 Extended-lifespan all-purpose fermentation for heat	heat	0.055	0.012	0.012	7,000
 Extended-lifespan all-purpose fermentation for renewable gas	gas	0.055	0.015	0.016	8,000
 Solid or liquid biomass boiler ≥ 0.5 MWth and < 5 MWth	heat	0.055	0.028	0.029	3,000
 Geothermal heat, ≥ 3,500 metres deep	heat	0.057	0.012	0.012	7,000
 All-purpose fermentation for heat	heat	0.058	0.022	0.023	7,000
 All-purpose fermentation for renewable gas	gas	0.058	0.015	0.016	8,000
 Extended-lifespan thermal conversion of biomass ≤ 50 MWe	CHP	0.061	0.019	0.019	4,429
 Wood-pellet boiler for industrial steam ≥ 5 MWth	heat	0.062	0.012	0.012	7,000
 Extended-lifespan co-fermentation of manure for renewable gas	gas	0.063	0.015	0.016	8,000
 Extended-lifespan co-fermentation of manure for heat	heat	0.064	0.012	0.012	7,000
 Onshore wind, ≥ 8.0 m/s	electricity	0.064	0.025	0.028	*
 All-purpose fermentation for CHP	CHP	0.065	0.021	0.022	7,436
 Extended-lifespan all-purpose fermentation for CHP	CHP	0.067	0.021	0.022	7,464

\* Net P50-value of full load hours taken from applicant's wind report. This value is determined on an individual basis for each project.

**Continued →**

**Table: SDE+ Autumn 2017 base amounts continued**










Category	Renewable energy form	Maximum base amount (€/kWh)	Base energy price (€/kWh)	Provisional correction amount 2017 (€/kWh)	Full load hours per annum
<b>Phase 1 – from 9 am, 3 October (continued)</b>					
 Wind on primary flood defences, ≥ 8.0 m/s	electricity	0.069	0.025	0.028	*
 Liquid biomass boiler ≥ 0.5 MWth	heat	0.070	0.022	0.023	7,000
 Onshore wind, ≥ 7.5 and < 8.0 m/s	electricity	0.070	0.025	0.028	*
 Co-fermentation of manure for heat	heat	0.075	0.022	0.023	7,000
 Onshore wind, ≥ 7.0 and < 7.5 m/s	electricity	0.075	0.025	0.028	*
 Wind on primary flood defences, ≥ 7.5 and < 8.0 m/s	electricity	0.075	0.025	0.028	*
 Extended-lifespan co-fermentation of manure for CHP	CHP	0.077	0.021	0.022	7,464
 Wind on primary flood defences, ≥ 7.0 and < 7.5 m/s	electricity	0.080	0.025	0.028	*
 Wastewater treatment / sewage treatment – thermal pressure hydrolysis	electricity	0.084	0.031	0.032	8,000
 Onshore wind, < 7.0 m/s	electricity	0.085	0.025	0.028	*
 Co-fermentation of manure for CHP	CHP	0.085	0.021	0.022	7,433
Free category maximum phase amount for phase 1	gas <sup>1</sup>	0.064			
Free category maximum phase amount for phase 1	other	0.090			
<b>Phase 2 – from 5 pm, 9 October</b>					
 Co-fermentation of manure for renewable gas	gas	0.074	0.015	0.016	8,000
 Wind on primary flood defences, < 7.0 m/s	electricity	0.091	0.025	0.028	*
 Solar thermal, thermal capacity ≥ 140 kW	heat	0.095	0.028	0.029	700
 Renovation of hydroelectric power station, drop of ≥ 50 cm	electricity	0.100	0.031	0.032	2,600
 Mono-fermentation ≤ 400 kW heat	heat	0.102	0.022	0.023	7,000

<sup>1</sup> Renewable gas is not fully included in European renewable energy targets. As a result, the phase boundaries for renewable gas differ from those for electricity and heat by a factor 0.706. Hence, different projects compete on the basis of the contributions they make to the target.

\* Net P50-value of full load hours taken from applicant's wind report. This value is determined on an individual basis for each project.

**Continued →**

**Table: SDE+ Autumn 2017 base amounts continued**

Category	Renewable energy form	Maximum base amount (€/kWh)	Base energy price (€/kWh)	Provisional correction amount 2017 (€/kWh)	Full load hours per annum
<b>Phase 2 – from 5 pm, 9 October (continued)</b>					
 Wind on lake, water ≥ 1 km <sup>2</sup>	electricity	0.104	0.025	0.028	*
Free category maximum phase amount for phase 2	gas <sup>1</sup>	0.078			
Free category maximum phase amount for phase 2	other	0.110			
<b>Phase 3 from 5 pm, 16 October to 5 pm, 26 October 2017</b>					
 Mono-fermentation ≤ 400 kW gas	gas	0.088	0.015	0.016	8,000
 Gasification of biomass for renewable gas	gas	0.092	0.015	0.016	7,500
 Photovoltaic solar panels, ≥ 15 kWp and < 1MWp and grid connection > 3*80 A	electricity	0.117	0.026	0.033	950
 Photovoltaic solar panels, ≥ 1MWp and grid connection > 3*80 A	electricity	0.117	0.026	0.033	950
 Mono-fermentation ≤ 400 kW CHP	CHP	0.125	0.030	0.031	7,200
 Hydroelectric power station, drop of ≥ 50 cm	electricity	0.130	0.031	0.032	5,700
 Hydroelectric free-flow-energy or wave energy, drop of < 50 cm	electricity	0.130	0.031	0.032	3,700
 Osmosis	electricity	0.130	0.031	0.032	8,000
Free category maximum phase amount for phase 3	gas <sup>1</sup>	0.092			
Free category maximum phase amount for phase 3	other	0.130			

<sup>1</sup> Renewable gas is not fully included in European renewable energy targets. As a result, the phase boundaries for renewable gas differ from those for electricity and heat by a factor 0.706. Hence, different projects compete on the basis of the contributions they make to the target.

\* Net P50-value of full load hours taken from applicant's wind report. This value is determined on an individual basis for each project.

## Further information

[www.rvo.nl/sde](http://www.rvo.nl/sde)

See also the SDE+ information video.

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The ministerial orders concerning the SDE+ can be found on the [Official Announcements \(Officiële bekendmakingen\)](#) page of the SDE+ website.

*While the greatest possible care has been taken in the compilation of this publication, the Netherlands Enterprise Agency cannot be held responsible for any errors it may contain.*

