

Wind Power



Windpower is only as reliable as the wind. Thus there is an inherent need for other power plants which can be switched on or off depending on whether the wind blows.

Uncontrollable



800 MEUR per brick.



Wind Power



Capacity Card 1

Wind Power



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Capacity Card 1

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Capacity Card 1

Wind Power



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Uncontrollable



800 MEUR per brick.



Wind Power



Capacity Card 1

Coal Power



Coal is the cheapest but least environmental friendly energy technology. Coal is distributed fairly evenly around the world. Therefore, security of supply is basically not an issue.

FLEXIBLE



800 MEUR per brick

INFLEXIBLE



500 MEUR per brick.



Coal Power

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the global coalition for a clean, prosperous and secure energy future

Capacity Card 2

Coal Power



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FLEXIBLE



800 MEUR per brick

INFLEXIBLE



500 MEUR per brick.



Coal Power



Capacity Card 2

Coal Power



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INFLEXIBLE



500 MEUR per brick.



Coal Power

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Capacity Card 2

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FLEXIBLE



800 MEUR per brick

INFLEXIBLE



500 MEUR per brick.



Coal Power

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Capacity Card 2

Coal Power with CCS



Carbon Capture & Storage (CCS) can reduce 90% of the CO₂ emissions from coal power. However, additional fuel is needed to capture the CO₂.

FLEXIBLE



900 MEUR per brick

INFLEXIBLE



600 MEUR per brick.

NB! CCS coal is shown as carbon neutral in CtG



Coal power with CCS



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Capacity Card 3

Coal Power with CCS



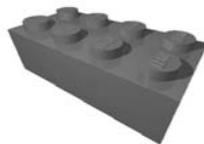
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Coal power with CCS



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Capacity Card 3

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Coal power with CCS



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Capacity Card 3

Coal Power with CCS



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900 MEUR per brick

INFLEXIBLE



600 MEUR per brick.

NB! CCS coal is shown as carbon neutral in CtG



Coal power with CCS



Capacity Card 3

Oil Power



Oil fired power plants are quite flexible and relatively inexpensive to construct. However, oil produces significant pollution and often bring about security issues.

FLEXIBLE



1400 MEUR per brick

INFLEXIBLE



1200 MEUR per brick.



Oil Power



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Capacity Card 4

Oil Power



Oil fired power plants are quite flexible and relatively inexpensive to construct. However, oil produces significant pollution and often bring about security issues.

FLEXIBLE



1400 MEUR per brick

INFLEXIBLE



1200 MEUR per brick.



Oil Power



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Capacity Card 4

Oil Power



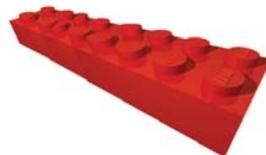
Oil fired power plants are quite flexible and relatively inexpensive to construct. However, oil produces significant pollution and often bring about security issues.

FLEXIBLE



1400 MEUR per brick

INFLEXIBLE



1200 MEUR per brick.



Oil Power



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Capacity Card 4

Oil Power



Oil fired power plants are quite flexible and relatively inexpensive to construct. However, oil produces significant pollution and often bring about security issues.

FLEXIBLE



1400 MEUR per brick

INFLEXIBLE



1200 MEUR per brick.



Oil Power

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Capacity Card 4

Biomass Power



Biomass power plants are expensive as they should be able to process wood, straw and possibly some forms of waste.

FLEXIBLE



1200 MEUR per brick

INFLEXIBLE



900 MEUR per brick.



Biomass Power

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Capacity Card 5

Biomass Power



Biomass power plants are expensive as they should be able to process wood, straw and possibly some forms of waste.

FLEXIBLE



1200 MEUR per brick

INFLEXIBLE



900 MEUR per brick.



Biomass Power



ENERGYCROSSROADS

the global coalition for a clean, prosperous and secure energy future

Capacity Card 5

Biomass Power



Biomass power plants are expensive as they should be able to process wood, straw and possibly some forms of waste.

FLEXIBLE



1200 MEUR per brick

INFLEXIBLE



900 MEUR per brick.



Biomass Power

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the global coalition for a clean, prosperous and secure energy future

Capacity Card 5

Biomass Power



Biomass power plants are expensive as they should be able to process wood, straw and possibly some forms of waste.

FLEXIBLE



1200 MEUR per brick

INFLEXIBLE



900 MEUR per brick.



Biomass Power



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Capacity Card 5

Gas turbines



Gas turbines can be built at a low capital cost. However, the natural gas is expensive to buy and is by and large imported from Russia.

FLEXIBLE



900 MEUR per brick

INFLEXIBLE



800 MEUR per brick.



Gas turbines

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Capacity Card 6

Gas turbines



Gas turbines can be built at a low capital cost. However, the natural gas is expensive to buy and is by and large imported from Russia.

FLEXIBLE



900 MEUR per brick

INFLEXIBLE



800 MEUR per brick.



Gas turbines

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Capacity Card 6

Gas turbines



Gas turbines can be built at a low capital cost. However, the natural gas is expensive to buy and is by and large imported from Russia.

FLEXIBLE



900 MEUR per brick

INFLEXIBLE



800 MEUR per brick.



Gas turbines

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Capacity Card 6

Gas turbines



Gas turbines can be built at a low capital cost. However, the natural gas is expensive to buy and is by and large imported from Russia.

FLEXIBLE



900 MEUR per brick

INFLEXIBLE



800 MEUR per brick.



Gas turbines

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Capacity Card 6

Hydropower



Hydropower is primarily used in Norway and Sweden where large areas have been flooded. Extra capacity can be built by damming and flooding additional areas.

FLEXIBLE



900 MEUR per brick

INFLEXIBLE



800 MEUR per brick.



Hydropower



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Capacity Card 7

Hydropower



Hydropower is primarily used in Norway and Sweden where large areas have been flooded. Extra capacity can be built by damming and flooding additional areas.

FLEXIBLE



900 MEUR per brick

INFLEXIBLE



800 MEUR per brick.



Hydropower



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Capacity Card 7

Hydropower



Hydropower is primarily used in Norway and Sweden where large areas have been flooded. Extra capacity can be built by damming and flooding additional areas.

FLEXIBLE



900 MEUR per brick

INFLEXIBLE



800 MEUR per brick.



Hydropower



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Capacity Card 7

Hydropower



Hydropower is primarily used in Norway and Sweden where large areas have been flooded. Extra capacity can be built by damming and flooding additional areas.

FLEXIBLE



900 MEUR per brick

INFLEXIBLE



800 MEUR per brick.



Hydropower



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Capacity Card 7

Nuclear Power



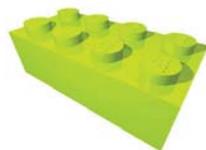
Nuclear power emits no CO₂ but it produces radioactive waste which must be disposed of.

FLEXIBLE



N/A

INFLEXIBLE



600 MEUR per brick.



Nuclear Power

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Capacity Card 8

Nuclear Power



Nuclear power emits no CO₂ but it produces radioactive waste which must be disposed of.

FLEXIBLE



N/A

INFLEXIBLE



600 MEUR per brick.



Nuclear Power



Capacity Card 8

Nuclear Power



Nuclear power emits no CO₂ but it produces radioactive waste which must be disposed of.

FLEXIBLE



N/A

INFLEXIBLE



600 MEUR per brick.



Nuclear Power



Capacity Card 8

Nuclear Power



Nuclear power emits no CO₂ but it produces radioactive waste which must be disposed of.

FLEXIBLE



N/A

INFLEXIBLE



600 MEUR per brick.



Nuclear Power



Capacity Card 8

Solar Photovoltaics

North

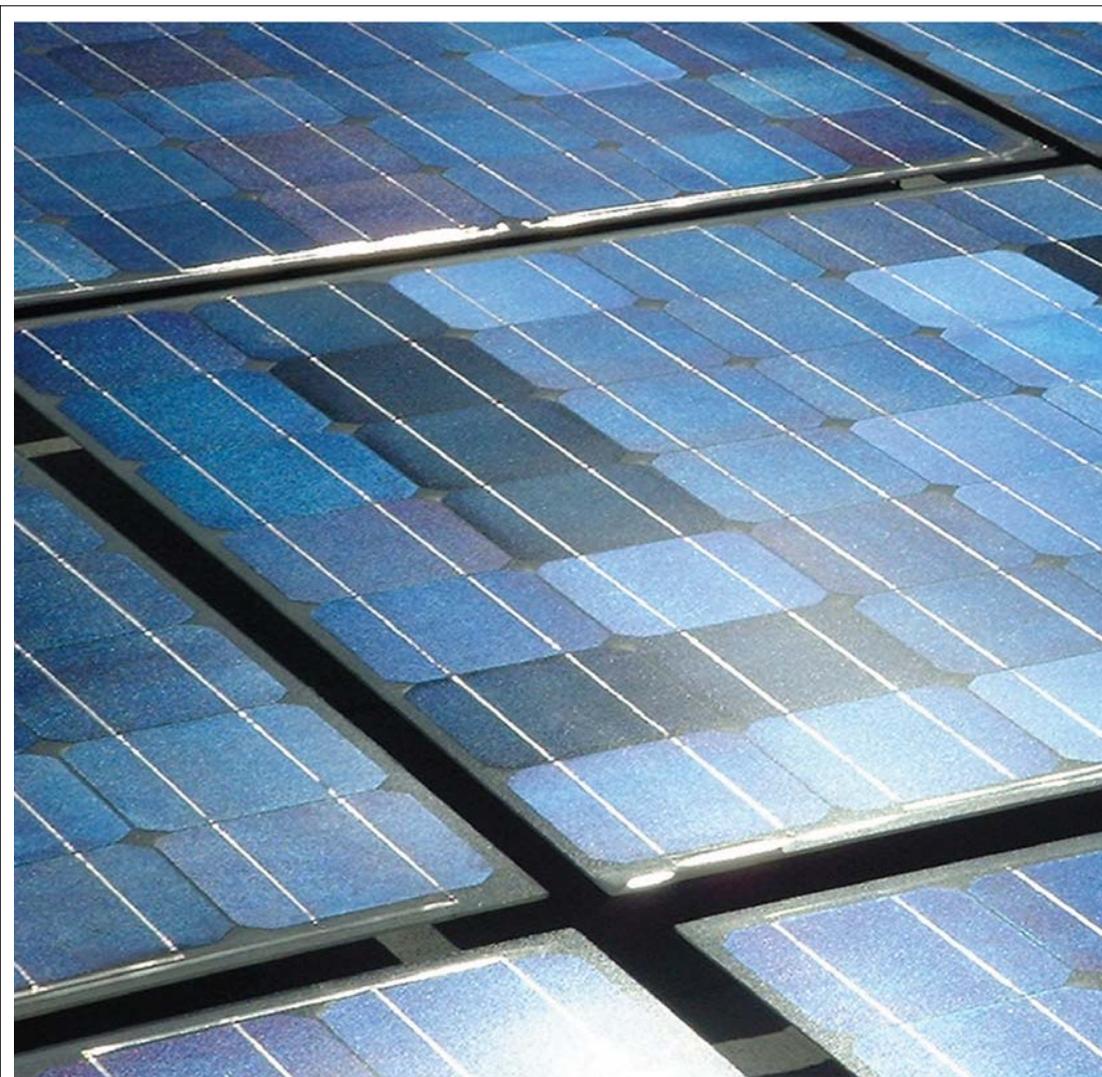


Solar PV's are expensive to produce and only generate energy in the daytime. Large areas of solar PV's are needed to produce the energy equivalent of 1 brick.

Uncontrollable



2500 MEUR per brick.



Solar Photovoltaics

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Capacity Card 9

Solar Photovoltaics

South



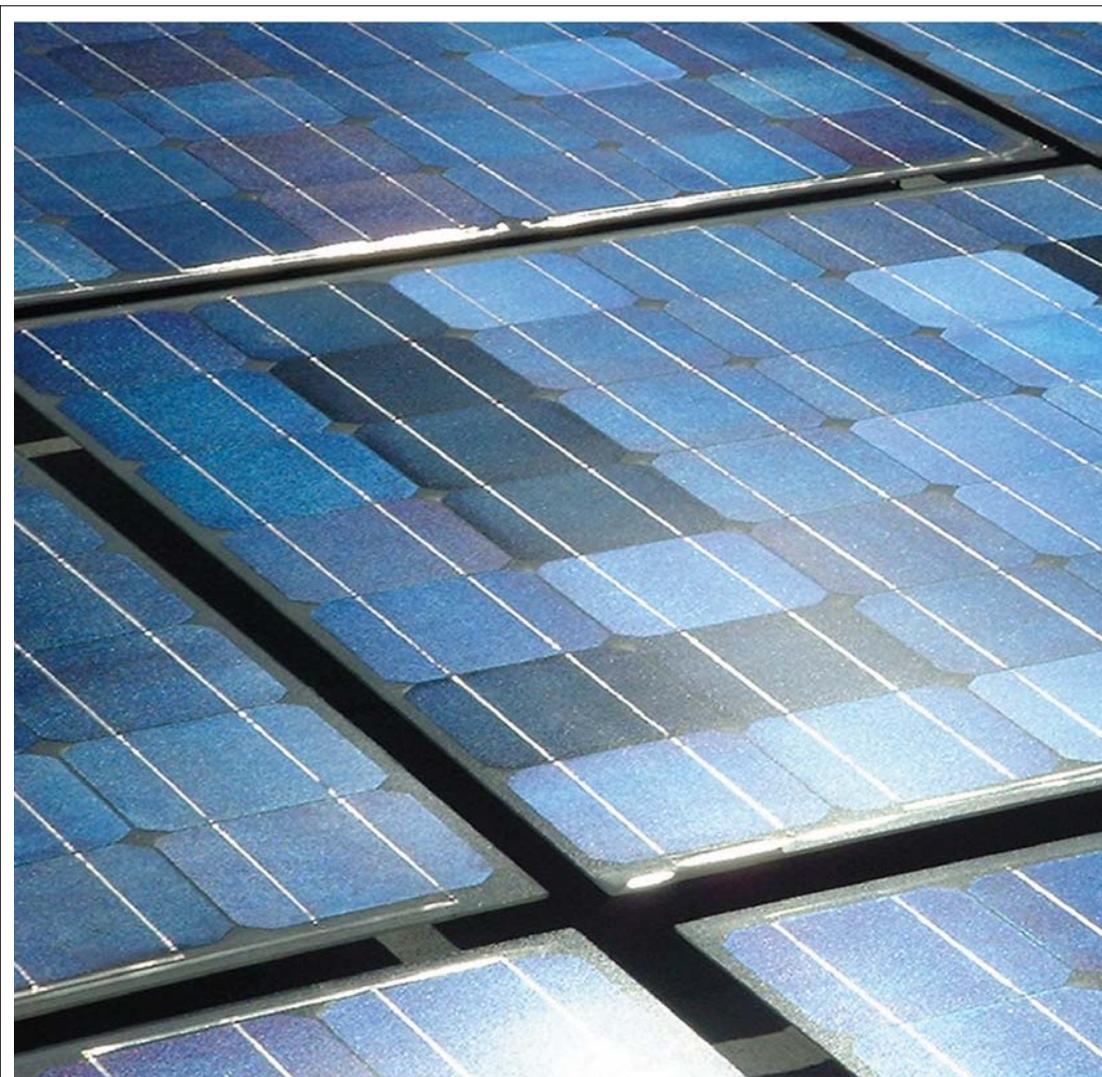
Solar PV's are expensive to produce and only generate energy in the daytime. Large areas of solar PV's are needed to produce the energy equivalent of 1 brick.

Uncontrollable



1500 MEUR per brick.

NB! PV's does not need to be backed up by flexible bricks in Southern Europe since PV output partly follows consumption patterns there.



Solar Photovoltaics



Capacity Card 9

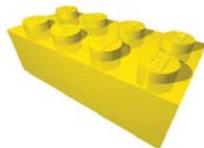
Solar Photovoltaics

East & West

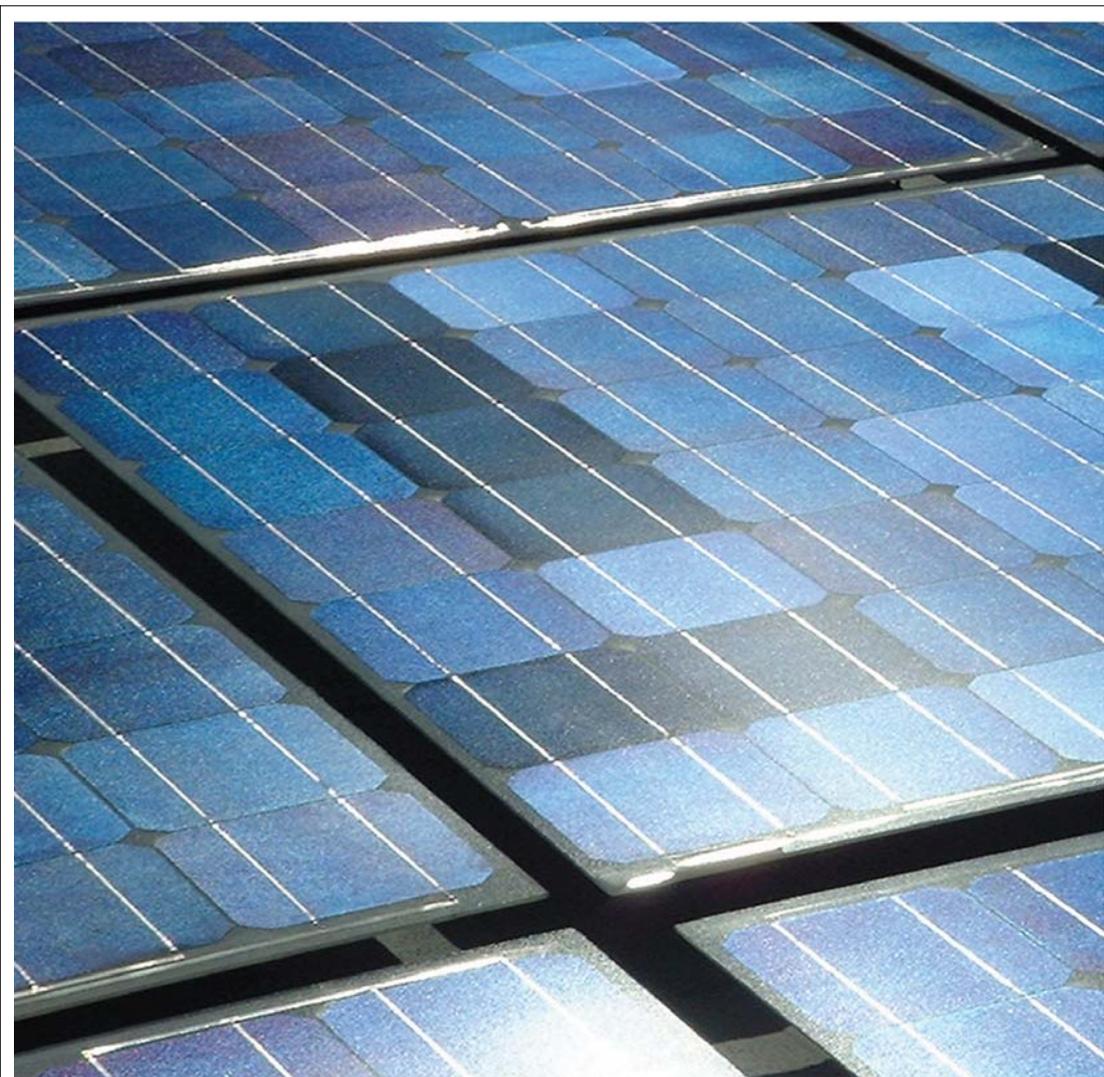


Solar PV's are expensive to produce and only generate energy in the daytime. Large areas of solar PV's are needed to produce the energy equivalent of 1 brick.

Uncontrollable



2000 MEUR per brick.



Solar Photovoltaics



Capacity Card 9

Solar Photovoltaics

East & West

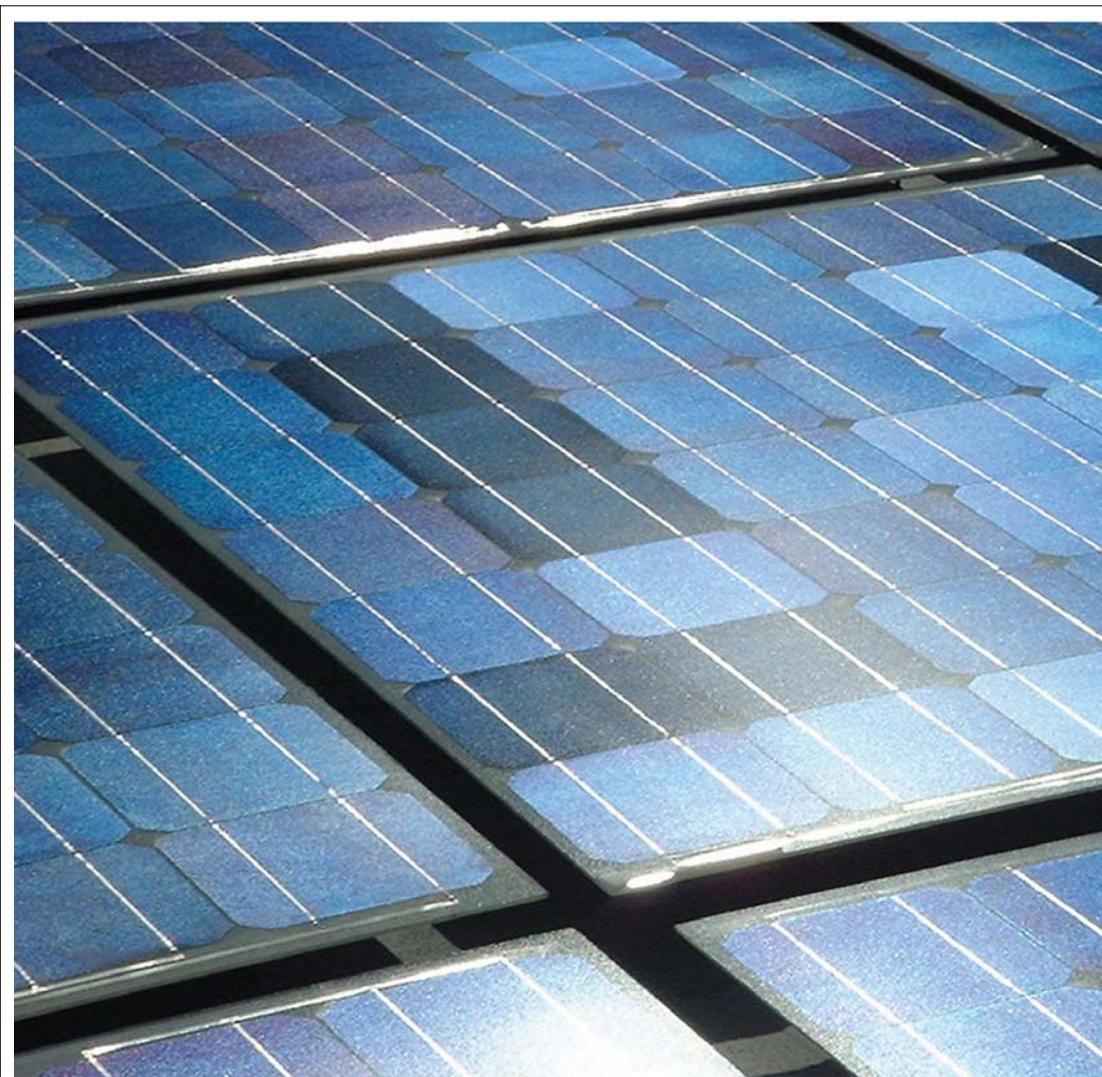


Solar PV's are expensive to produce and only generate energy in the daytime. Large areas of solar PV's are needed to produce the energy equivalent of 1 brick.

Uncontrollable



2000 MEUR per brick.



Solar Photovoltaics

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Capacity Card 9

Concentrated Solar Power

South



Concentrating sunlight with mirrors produces heat similar to burning fuel. High levels of radiance are needed to run the generate electricity sufficiently.

Inflexible



700 MEUR per brick.

NB! CSP does not need to be backed up by flexible bricks in Southern Europe since CSP output partly follows consumption patterns.



Concentrated Solar Power

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Capacity Card 10

North Africa is almost Europe

East



Producing electricity for your region with concentrated solar power in North Africa can be made possible. CSP generates electricity with concentrated sunlight as heat source instead of fuel. **Requires supergrid connection to South Europe.**

Inflexible



700 MEUR per brick. MAX 3 BRICKS!

NB! CSP does not need to be backed up by flexible bricks since CSP output partly follows consumption patterns.



North Africa is almost Europe

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the global coalition for a clean, prosperous and secure energy future

Capacity Card 11

North Africa is almost Europe

West



Producing electricity for your region with concentrated solar power in North Africa can be made possible. CSP generates electricity with concentrated sunlight as heat source instead of fuel. **Requires supergrid connection to South Europe.**

Inflexible



700 MEUR per brick. MAX 3 BRICKS!

NB! CSP does not need to be backed up by flexible bricks since CSP output partly follows consumption patterns.



North Africa is almost Europe

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Capacity Card 11

North Africa is almost Europe

North



Producing electricity for your region with concentrated solar power in North Africa can be made possible. CSP generates electricity with concentrated sunlight as heat source instead of fuel. **Requires supergrid connection to South Europe.**

Inflexible



700 MEUR per brick. MAX 2 BRICKS!

NB! CSP does not need to be backed up by flexible bricks since CSP output partly follows consumption patterns.



North Africa is almost Europe

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Capacity Card 11

North Africa is almost Europe

South



Producing electricity for your region with concentrated solar power in North Africa can be made possible. CSP generates electricity with concentrated sunlight as heat source instead of fuel. **Requires supergrid connection.**

Inflexible



700 MEUR per brick. MAX 4 BRICKS!

NB! CSP does not need to be backed up by flexible bricks since CSP output partly follows consumption patterns.



North Africa is almost Europe

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Capacity Card 11