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# Solar cells on the rooftop of the Royal Palace of Stockholm



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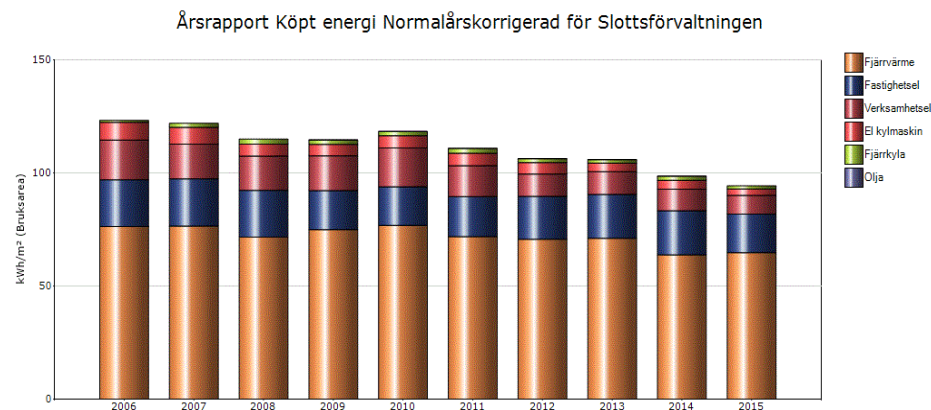


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# Sustainability Work: A Short Brief

- Deep common interest and an ongoing cooperation between the National Property Board and the Royal Court to optimise and adapt the operation of the Royal Palace
- District heating optimisation – the conversion of the Värtaverket power plant to biomass heating (2016, Stockholm Exergi)
- Well-developed waste sorting complemented by compostable waste
- Gradual conversion to LED lighting
- Gradual transition to electric cars and the installation of charging stations





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# Pilot Project 2010





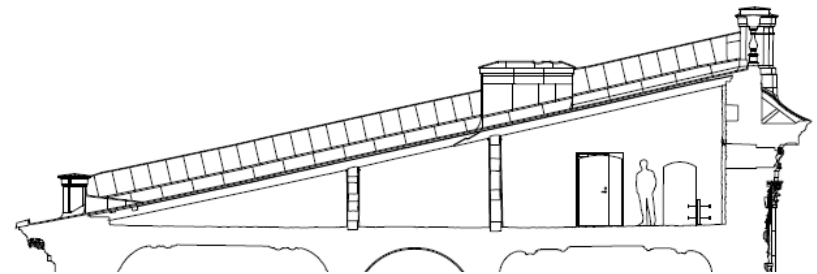
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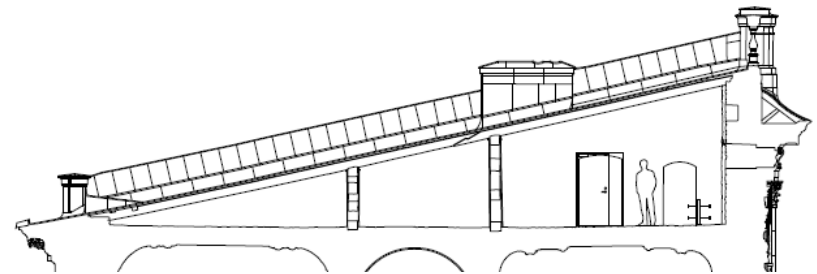
# Ideal roof: Pent roof





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# Location of solar panels

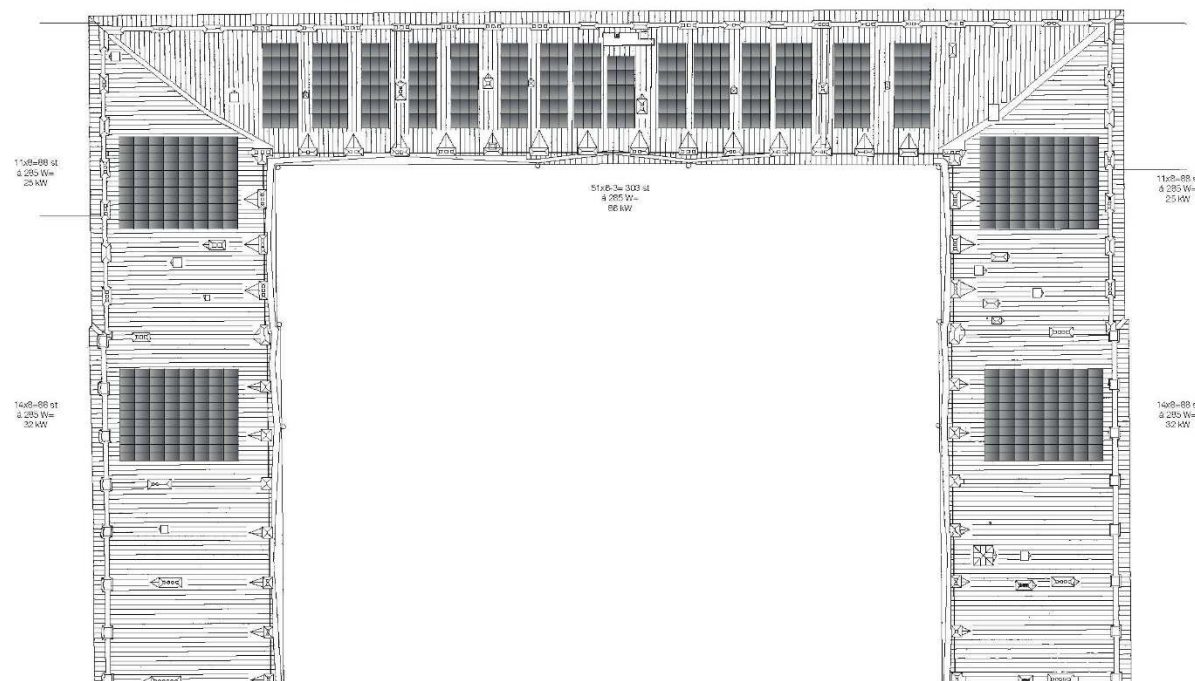




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187 kW / 1100 kvm  
Randigt med 6 moduler + spegling





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# Delivery April 19, with press





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# Expected effect

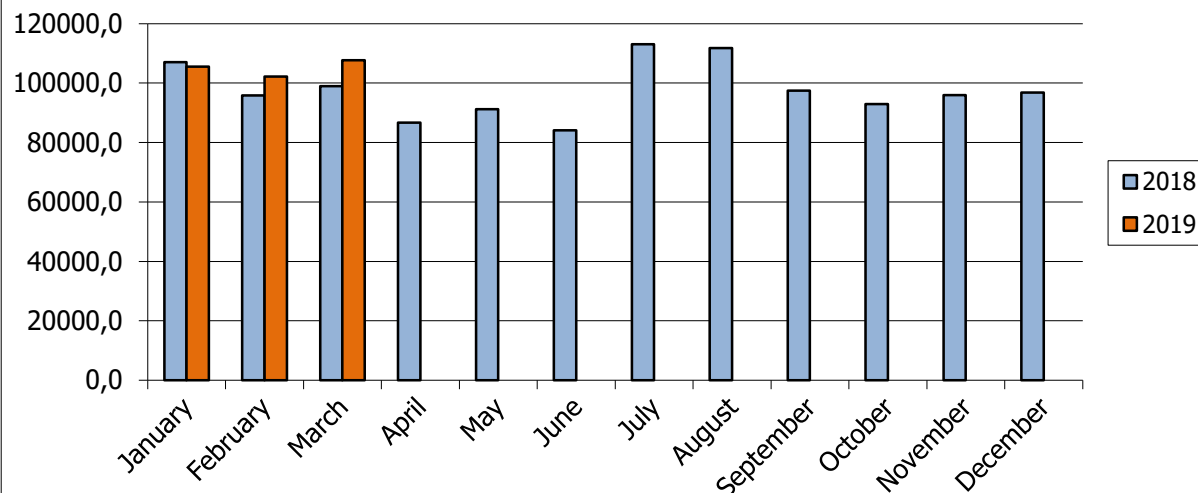
- The installation consists of approximately 600 panels with a total area of approximately 1,000 m<sup>2</sup>.
- The installation will generate an annual effect of approximately 170 MWh, which corresponds to at least 12 percent of the palace's total electricity consumption.



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### Monthly electricity report, kWh for AB301001, The Royal Palace



	Consumed kWh (2018)	Consumed kWh (2019)	Solar power, kWh (2018)	Solar power, kWh (2019)	Solar power accounts for
January	107,043.9	105,559.5		526.0	0.50%
February	95,804.3	102,170.5		3,890.0	3.81%
March	98,932.1	107,624.5		9,014.0	8.38%
April	86,732.8	95,410.3		18,363.0	19.25%
May	91,172.7	45,500.0		10,000.0	21.98%
June	84,105.0		29,755.0		35.38%
July	113,051.6		27,885.0		24.67%
August	111,722.1		205,28.0		18.37%
September	97,497.0		12,614.0		12.94%
October	92,963.2		6,418.0		6.90%
November	95,927.9		1,315.0		1.37%
December	96,773.3		348.0		0.36%
				Total savings	12.82%
Total (Year)	1,171,725.9		98,863.0	41,793.0	
Accumulated	301,780.3	315,354.5		Total produced	140,656.0



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# What happens now?

- We keep track of the installation's production on a daily basis via an app providing information in real time.
- The work with solar cells is highly topical for the National Property Board Sweden. In December 2018, the spending authorisation for the National Property Board Sweden allocated 25 MSEK to the organisation for the purpose of installing solar cells during 2019 on a number of buildings with high cultural values.
- Early plans on implementing solar cell installations at secondary buildings at the lands of Haga, Ulriksdal and Drottningholm palaces.





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