

# VILLUM RESEARCH STATION, ENERGY

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Professor



**iCLIMATE** INTERDISCIPLINARY  
CENTRE FOR CLIMATE CHANGE

**ENERGY**  
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# CONTENT

Where is Villum Research Station

The energy system

The basic structure of buildings at The Station



# VILLUM RESEARCH STATION, GREENLAND

81° 36' N 16° 40' W





# ENERGY CONSUMPTION IN BUILDINGS 2018

	Solar cells	Consumption
Month	kWh	kWh
Jan		14,900.00
Feb		13,964.00
Mar	150.00	11,547.00
Apr	1,458.00	7,717.00
May	1,998.00	5,092.00
Jun	2,960.00	4,220.00
Jul	2,628.00	3,225.00
Aug	3,134.00	5,728.00
Sep	455.00	6,662.00
Oct	42.00	8,849.00
Nov		9,219.00
Dec		14,359.00
sum	12,825.00	105,482.00

**12% of energy is covered by solar panels**

**Total cost is 69,396.05 € and**

**Solar panel saves 8,437.50 €**

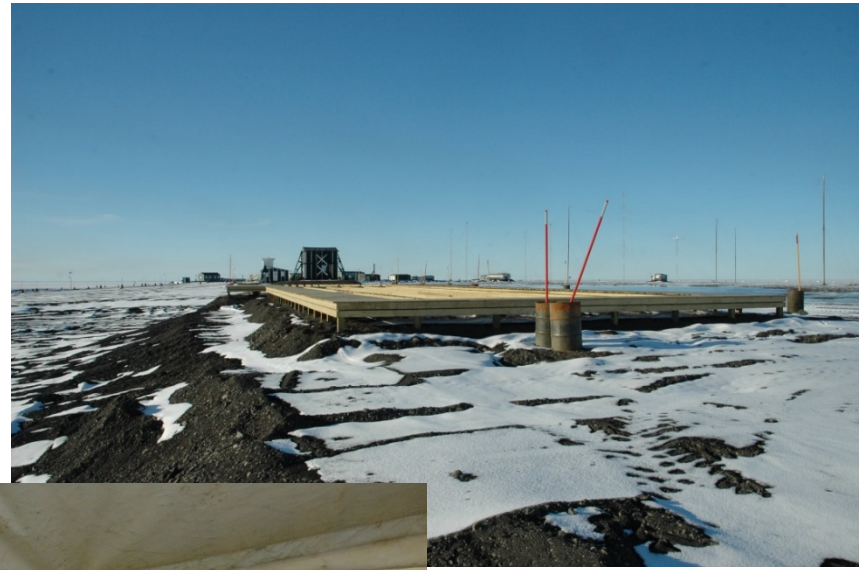
**Construction 134,000 €**



# TRAVELS AND TRANSPORT AT STATION

- Diesel driven power generators
- Fill the aircrafts as much as possible
- Use bikes, ski etc. as much as possible
- Make insulation and build low





# TWO GENERATORS THAT CAN REPLACE ONE ANOTHER, AND AN OLD EMERGENCY GENERATOR





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- Interact
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**Thank you for your attention**



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