

# Alderney 5 Project Update HRM Regional Council

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## Alderney 5 Energy Project



Total area = 330,000 ft<sup>2</sup>

2004 Energy Costs: \$556,000

( Electricity \$406,000 and Oil \$155,000 (based on \$0.38/litre) )

2007 Energy Costs; \$730,000

2011 Energy Costs — would have been \$900,000

### There were 5 Elements of Project (\$2.7M)

- #1 Lighting Retrofit
- #2 District Energy - Heating and Cooling Piping
- #3 New High Efficiency Gas Boilers
- #4 Seawater Cooling System
- #5 World's first Geothermal Cold Energy Storage System

2011  
Historic  
milestone  
100%  
renewable  
energy for  
A/C

# Alderney 5 Energy Project: World's First Geothermal Cold Storage System How it works...

**Project supports HRM Council directives:**

- To reduce costs
- To reduce GHGs by 20% by 2012
- Develop sustainable economic and environmental solutions

**2,000 Tonnes  
of CO<sup>2</sup>e  
reductions**

**Eliminate  
use of over  
2,200 lbs of  
CFC  
refrigerants**

**No water  
consumption  
or noise  
associated  
with A/C**

**\$850,000 in  
Avoided capital  
ROI: 14.9%**

**Total Savings  
\$400,000/year**  
(\$250,000 was original  
prediction)



Questions?



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