



# IEA SOLAR HEATING & COOLING PROGRAMME

# IEA SHC - Member Countries



**Australia**



**Austria**



**Belgium**



**Canada**



**China**



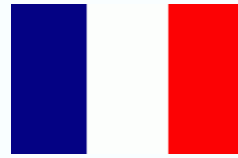
**Denmark**



**EC**



**Finland**



**France**



**Germany**



**Italy**



**Mexico**



**Netherlands**



**Norway**



**Portugal**



**Singapore**



**South Africa**



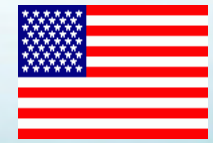
**Spain**



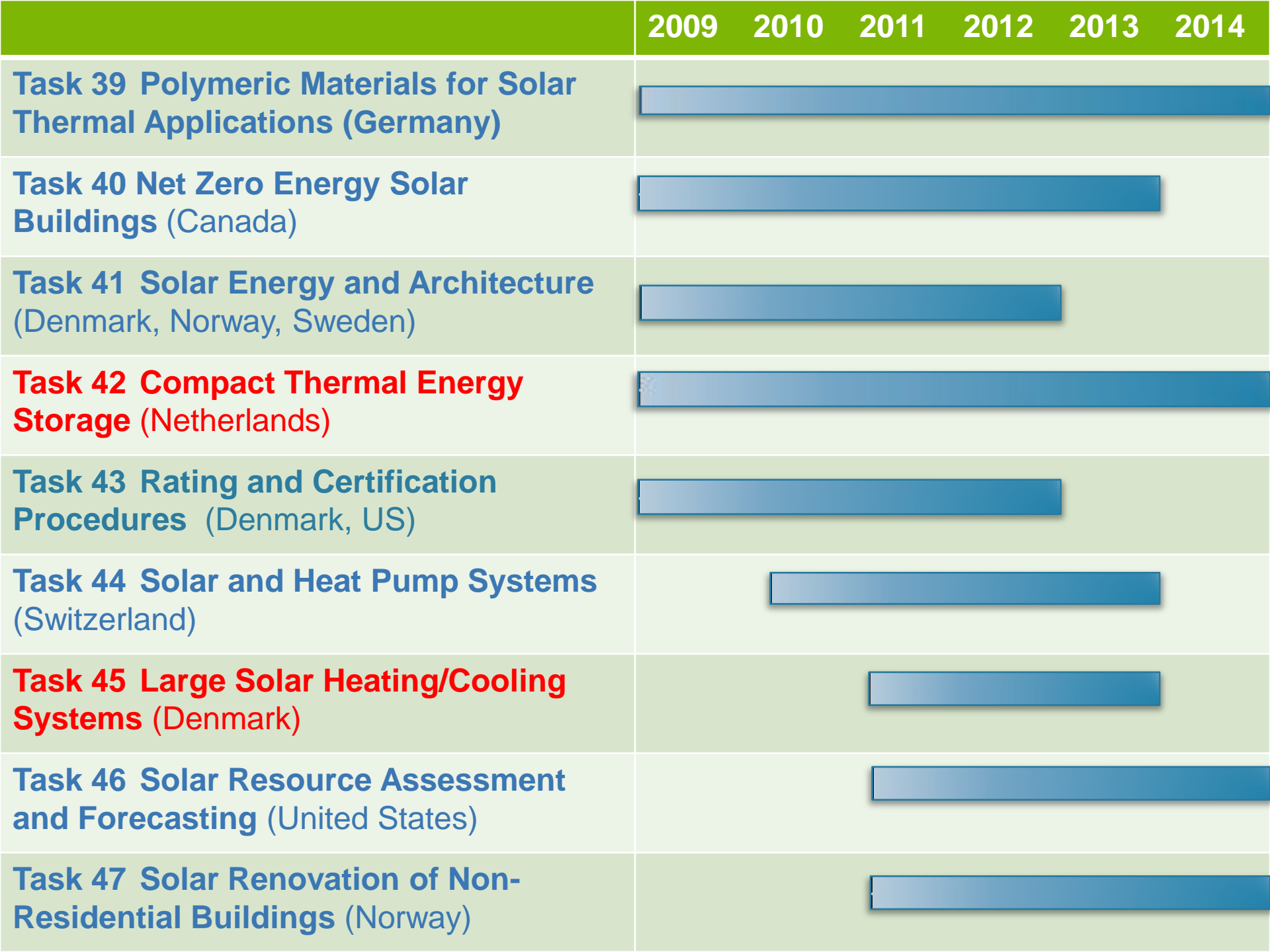
**Sweden**



**Switzerland**



**United States**

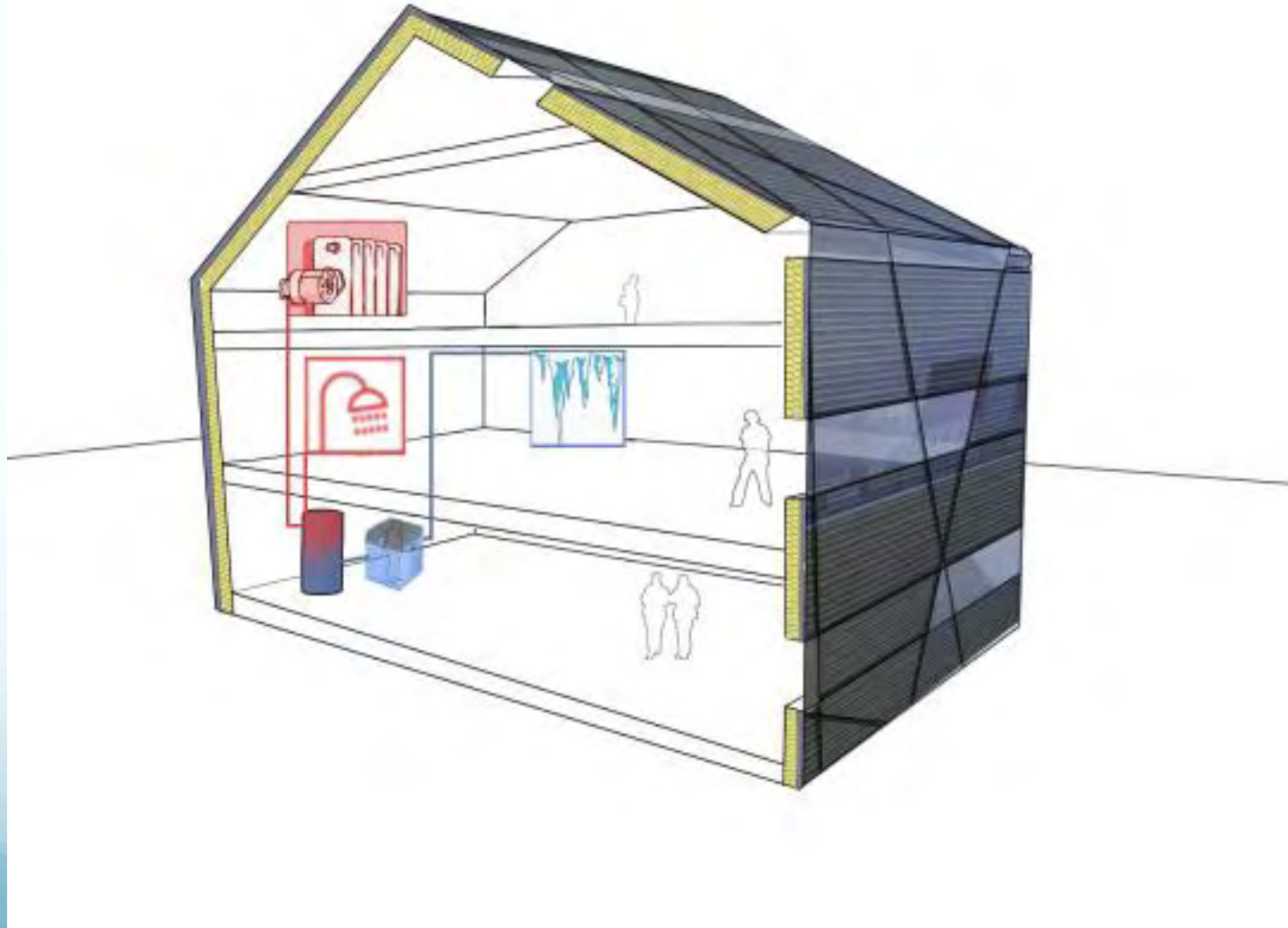


|  | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 |
|--|------|------|------|------|------|------|
| <b>Task 48 Quality Assurance and Support Measures for Solar Cooling Systems (France)</b> |      |      |      |      |      |      |
| <b>Task 49 Solar Heat Integration in Industrial Processes (Austria)</b>                  |      |      |      |      |      |      |
| <b>Task 50 Advanced Lighting Solutions for Retrofitting Buildings (Germany)</b>          |      |      |      |      |      |      |
| <b>Task 51 Solar Energy and Urban Planning (Sweden)</b>                                  |      |      |      |      |      |      |
| <b>Task Definition: Solar Thermal &amp; Energy Economics in Urban Environments</b>       |      |      |      |      |      |      |
|  |      |      |      |      |      |      |
|  |      |      |      |      |      |      |
| <a href="http://www.iea-shc.org">www.iea-shc.org</a>                                     |      |      |      |      |      |      |

# Distributed Energy Storage Systems

# Compact Thermal Energy Storage

## Task 42/24



# Large Solar Heating and Cooling Systems – Task 45

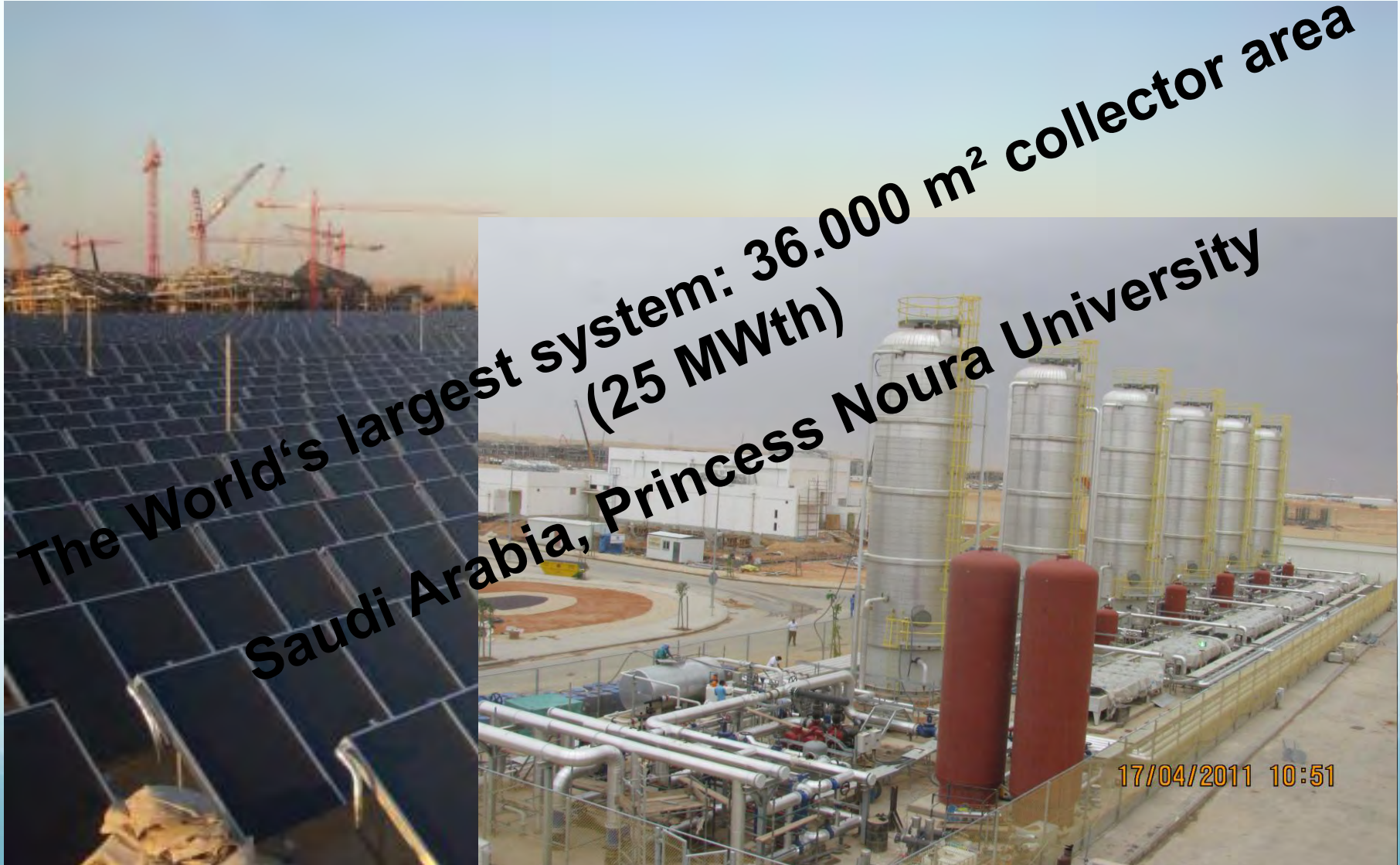
Integration of large-scale solar thermal systems into:

- Local district heating
- Urban district heating



# Large Solar Heating/Cooling Systems

## Task 45

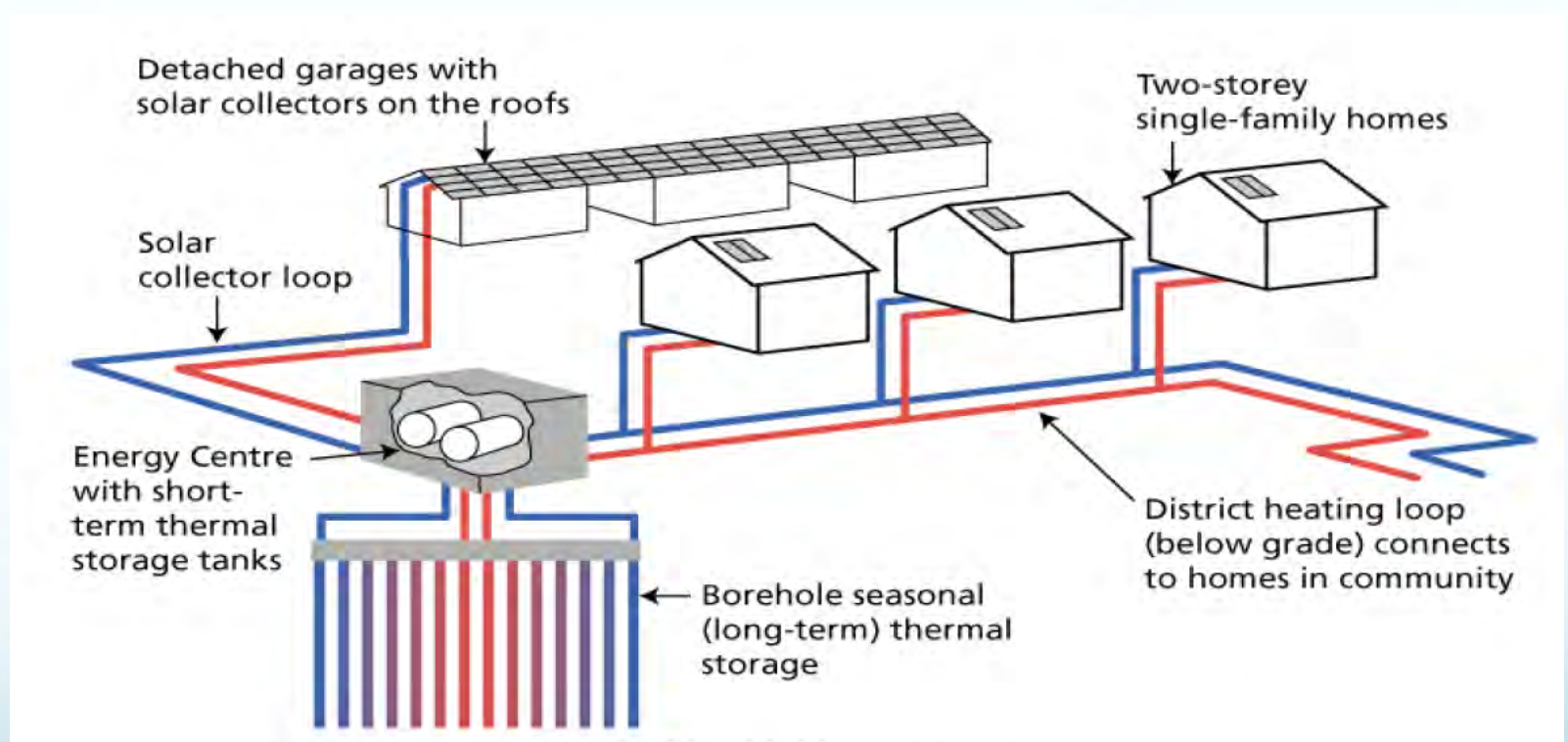




# Drake Landing Solar Community, Canada

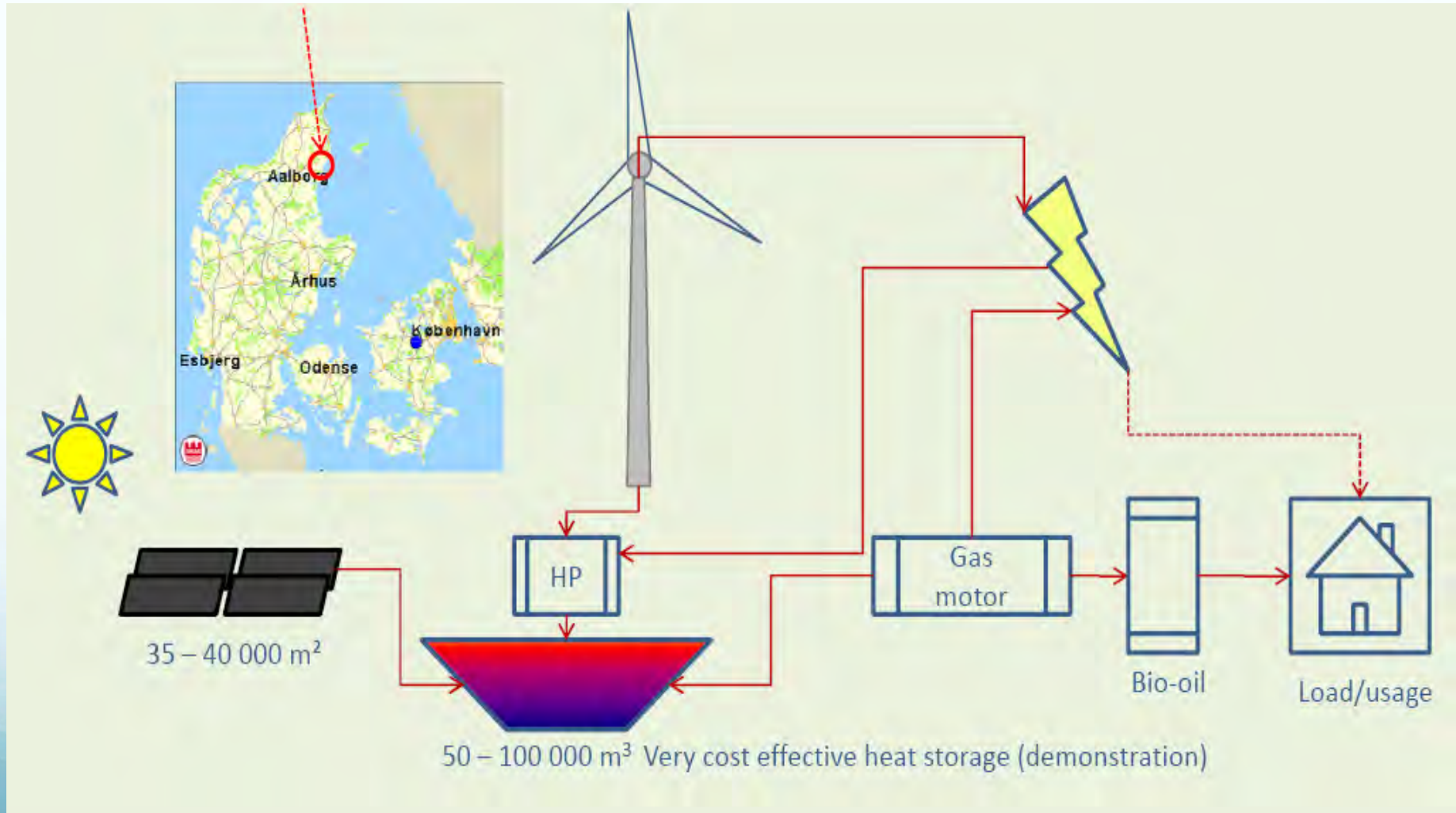


# Drake Landing Solar Community, Canada



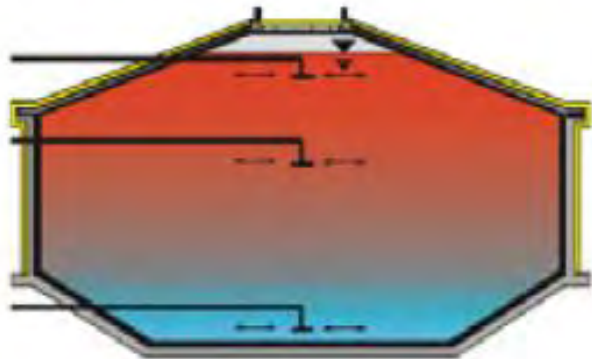
# Smart District Heating Systems

## Integration of heat and electrical grids

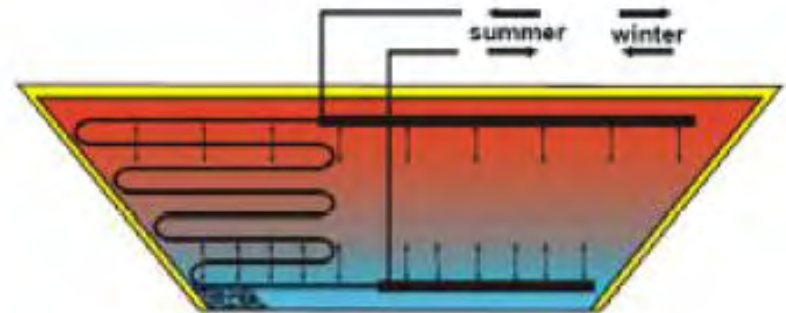


# Different types of seasonal storages

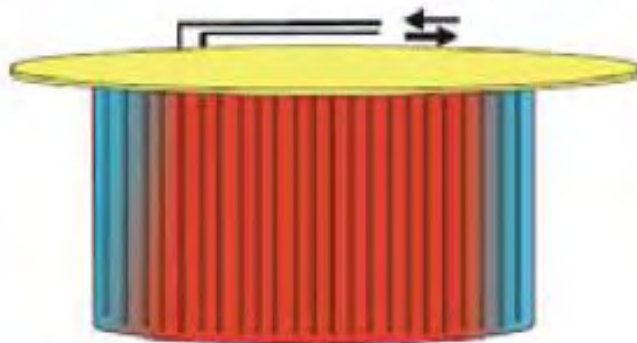
Hot-water thermal energy store



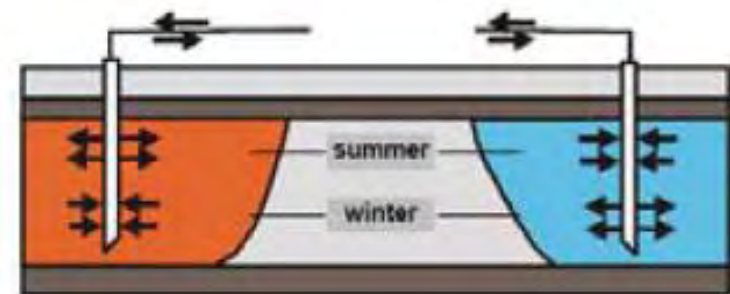
Gravel-water thermal energy store



Borehole thermal energy store



Aquifer thermal energy store

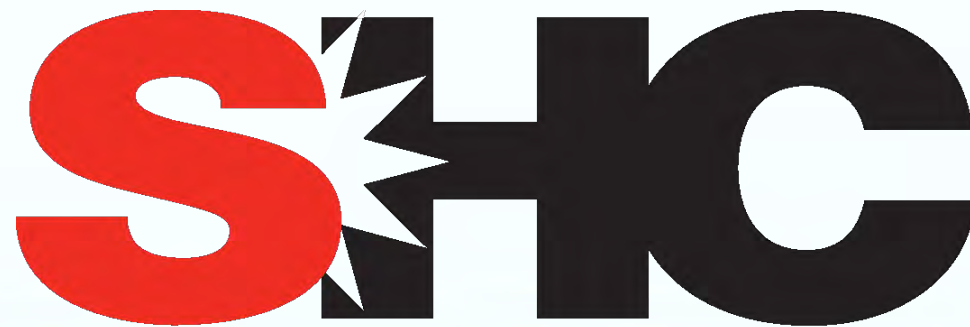


# Integration of industrial process heat



Source: SOLID GmbH. Graz Austria

# Thank You



**SOLAR HEATING & COOLING PROGRAMME**  
**INTERNATIONAL ENERGY AGENCY**

[www.iea-shc.org](http://www.iea-shc.org)