## SUSTAINABLE GENERATION OF HEATING OR COOLING

#### **OBJECTIVE**

Use renewable energy sources.

### **DESCRIPTION**

Implementation of solar, geothermal and biomass systems.

#### **EXPECTED RESULTS**

Use of renewable energy sources; response to the expected higher demand for cooling buildings in summer and limitation in the use of air conditioning systems based on fossil energy; greenhouse gas emission reduction; reduction of dependency on fossil or nuclear energy sources like gas, oil, coal or uranium.

### **RESULT INDICATORS**

Energy production from renewable sources [MWh or kWh]

### **INVOLVED ACTORS**

Municipality, renewable energy specialist, builders, buyers.

### **EXPECTED TIMELINE FOR ACTION**

• Short term (1-4 years)

### **BEST PRACTICES**

- Copenhagen Denmark; Tartu Estonia; Paris France; Brescia Italy; Barcellona Spain; Stockholm Sweden
- Veneto Region Italy
- Veneto Region Italy
- Unione dei Comuni Medio Brenta Veneto Italy
- Veneto Region Italy
- Friuli Venezia Giulia Autonomous Region Italy
- Marche Region Italy
- Marche Region Italy
- Marche Region Italy
- Apulia Region Italy

### **CRITICALITIES**

Solar panels could be contradictory with green walls and roofs; interference with the underground function and setting; development is subjected to a complex process; lack of know-how of building and maintaining services.



### **SCOPE OF THE ACTION**

- Adaptation
- Mitigation

### **TYPE OF PROPOSED ACTIONS**

• Grey

## **SECTOR OF ACTION**

- Energy
- Public health
- Urban settlement
- Other

## **CLIMATE IMPACTS**

- Extreme temperatures
- Other

# **IMPLEMENTATION SCALE**

- Association of municipalities
- Municipality
- Region / Country

# **SOURCE**

 $http://www.future-cities.eu/fileadmin/user\_upload/pdf/FC\_AdaptationCompass\_Supplement\_web.pdf \\ https://www.venetoadapt.it/wp-content/uploads/2020/03/Del%20A2%20-%20VenetoADAPT%20Adaptation% \\ 20State%20of%20the%20art%20assessment.pdf$ 

