



PROGRAMUL DE COOPERARE ELVEȚIANO-ROMÂN  
SWISS-ROMANIAN COOPERATION PROGRAMME



# ORAȘE VERZI – REGIUNI VERZI

(GREEN CITIES – GREEN REGIONS)

## COURSE

### «Emission Greenhouse Gas Inventories for Local Government»

## MODULE II

Sinaia, 18 - 20 November 2015





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## SUSTAINABLE ENERGY ACTION PLAN CITY OF GENEVA

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**Overall CO2 emission reduction target (%) by 2020**

21%

**Baseline year**

2005

[http://www.covenantofmayors.eu/about/signatories\\_en.html?city\\_id=1460&overview](http://www.covenantofmayors.eu/about/signatories_en.html?city_id=1460&overview)



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## Long-term mission

- The City of Geneva develops its energy and climate policy aiming for **zero CO2 emission and 100% renewable energy in 2050**.
- Aims at reducing its **energy consumption by half thanks to energetic refurbishments of its buildings** and shares its targets with the others territory stakeholders.
- In 2009, the City of Geneva adopted the global “**Together for a 100% renewable city by 2050**” vision in its climate and energy policies + action plan. The idea is to go beyond **energy consumption, by also targeting mobility, industry, services and household consumption**.



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### [Action Plan in a Nutshell](#)

Date of formal approval: 2010-09-24

Overall CO<sub>2</sub> emission reduction target: 21%

### [Sustainable Energy Action Plan Documents](#)

Title	Size	Language	
<a href="#">Together, towards a zero emissions and 100% renewable City in 2050 - SEAP abstract</a>	160224 kB	en	
<a href="#">Ensemble, pour une Ville de Genève 100% renouvelable et zéro émissions en 2050</a>	161599 kB	fr	
<a href="#">Politique énergétique et climatique de la Ville de Genève</a>	427861 kB	fr	
<a href="#">EEA-Gold abstract presentation</a>	1926125 kB	en	
<a href="#">Strategic plan for the sustainable development of the City of Geneva 2011-2014</a>	958772 kB	en	
<a href="#">Sustainable development in the City of Geneva 2010 baseline review report 2011</a>	1539582 kB	en	



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# Objectives of the Geneva Energy and Climate Policy

- Raise investments to consume less
- Integrate energy and climate issues to urban planning
- Reduce our electricity consumption
- Reduce our water consumption
- **Reduce our dependence on fossil fuels and develop renewable energy**
- Reduce climate impacts of public administration transport
- Reducing individual motorized traffic
- Inform and inspire
- Renew the image and the promotion of the City of Geneva
- Boosting our regional collaborations



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## Example Objective 5: Reduce dependence on fossil fuels and develop renewable energy

### New renewable and local energy

- The 100% renewable strategy in 2050 for heating needs of its buildings introduced the systematic development of feasibility studies in constructive procedures. These studies demonstrate the existence of **potential for local transition to renewable energies**. They stress that this transition is often **economically advantageous**.

### Implementation of new technologies

- An intensification of the implementation of innovative and efficient technologies is a priority in order to meet the objectives of the strategy, based on the experience of the pilot projects using geothermal, **the Genève-Lac-Nations network** or wood waste from the green areas of the City. A flagship project for the coming years is the **use of heat from wastewater collection to power heat pumps** to cover the thermal needs of four large apartment buildings.



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### Programme de politique énergétique et climatique 2009 – 2013



Catalogue EEA 2.2 : Exemplarité, valeurs cibles		
Objectif de politique énergétique et climatique : Développer les énergies renouvelables		
<b>Mettre en oeuvre de nouvelles technologies pour la couverture des besoins en chaleur</b>		
Création : 29.03.2009	Mise à jour :	Fiche projet <b>17</b>

#### Objectif général

Mettre en œuvre des technologies innovantes et efficaces en vue de répondre aux objectifs de la stratégie "100% renouvelable en 2050"

#### Service responsable – personne de contact

ENE

#### Collaborations

ARC / BAT / SCanE / SIG

#### Constat

Il convient de diversifier les sources d'énergie utilisables pour la production de chaleur et de mettre en œuvre de nouvelles solutions technologiques.

#### Indicateurs

Production de chaleur des projets pilotes [kWh]  
Part des énergies renouvelables dans la consommation totale

#### Description de la mesure – Objectifs détaillés

Mise en œuvre de projets pilotes utilisant la géothermie, le réseau Genève-Lac-Nations ou les déchets bois des espaces verts de la Ville, solutions mixtes gaz, pompe à chaleur, technologies de forage ou exploitation de sources de chaleur à valoriser.

#### Spécificités pour la mise en œuvre

Etudes de faisabilité systématiques.  
Veille technologique.

#### Estimation financière

<b>Financement</b>	Crédits de politique énergétique Crédits de constructions
<b>Priorité</b>	1
<b>Délais</b>	permanent
<b>Validation</b>	Rémy Pagani



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## Coordination and organisational structures created/assigned

The Geneva energy department is responsible for monitoring and relations with the Covenant of Mayors. It is also responsible for implementing and monitoring Geneva's energy and climate policy and its associated targets.

**Overall estimated budget:** around CHF 560 million / 465 million €

**Foreseen financing sources for the investments within your action plan:**

- Public investments (City of Geneva and Geneva Council)
- Investment of public partners (SIG and TPG)
- Cantonal and federal grants
- Private investments
- Public - private partnerships



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# Involvement of stakeholders and citizens

- At the center of **an agglomeration of nearly 1 million people**, the City of Geneva consistently posted its energy and climate policy in a dynamic partnership with local stakeholders (Swiss and European).
- The main discussions were made between the State of Geneva Council and its key partners or semi-public organizations (municipalities, SIG, TPG, etc.) as well as private actors (properties managers and construction actors) in order to share and exchange common existing tools and financial resources.
- A **broad public consultation process** on the City of Geneva's sustainable development policy was conducted between 2009 and 2010 under the signature of the Aalborg Commitments. This process has also pointed out specific targets on energy and climate matters.
- These targets were approved by City Council in September 2010. The REVE d'Avenir project, started in 2010, sets up a regional dynamic cooperation and exchanges between the 27 participating cities.