

Open discussion on the topic of Energy.

Let's share our points of view as to prepare the briefing materials for the discussion in a participated way .

Premise to the topic: Energy

EU policies and goals

Since the early 1990s, in the fight of climate change and global warming, the EU has taken action in climate and energy policy, focussing on greenhouse gases reduction and renewable energies development. But only in 2007 the European Union showed itself ready to give global leadership: the "Energy Policy for Europe"¹ has set a wholly achievable goal to tackle climate change, to face up to the challenge of secure, sustainable and competitive energy, and to make the European economy a model for sustainable development in the 21st century.

To do so, it has set itself important energy objectives: to establish the internal energy market, to ensure a secure energy supply, to reduce greenhouse gas emissions, to develop energy technologies, to consider the future of nuclear energy and to implement a common international energy policy.

The EU operating goals for the near future are the following:

- A reduction of at least 20% in greenhouse gases (GHG) by 2020 - rising to 30% if there is an international agreement committing other developed countries¹;
- A 20% share of renewable energies in EU energy consumption by 2020 (today, the share of renewable energy in the EU's final energy consumption is 8.5%. An increase of 11.5% is needed on average to meet the target of 20% in 2020);
- An updating of the Emissions Trading System (ETS) with the inclusion of greenhouse gases other than CO₂ and all major industrial emitters;
- An "environment proof" Carbon Capture and Storage (CSS) policy, which includes twelve new plants in Europe before 2015.

The reasons for the changing

EU will be much less dependent on imports of oil and gas reducing the exposure of the EU economy to rising and volatile energy prices, inflation, geopolitical risks and risks related to inadequate supply chains that are not keeping up with global demand growth.

¹ Communication from the Commission of 19 October 2006 entitled: Action Plan for Energy Efficiency: Realising the Potential

An integrated Energy Efficiency Action Plan can thus improve the Union's competitiveness, the living standards of its citizens, boost employment and increase exports of new, energy-efficient technology.

On an individual level, small changes in our energy consumption patterns will mean saving money, helping the environment and doing our bit for a common European goal.

The warming of the climate system is unequivocal, as is now evident from observations of increases in global average air and ocean temperatures, widespread melting of snow and ice, and rising global mean sea level.

The consequences of the changing

It is necessary, in order to reach those goals, a complexity of integrated actions with an active involvement of local governments, enterprises and single citizens. In this scenario of changing, two interpretations, closely related, can be sensed:

- (infrastructures) the first one makes reference to a **structural adjustment of the energetic system** and it deals directly with the energy production: sources, resources, technology and required distribution systems.
- (behaviours) the second one makes reference to **the change of people's daily habits** and it deals directly with their life style: housing, transportation, consumptions, recycling and so on.

The discussion, during the common part of the Town Meeting, will focus on the articulation of these two interpretations, with the aim to define the stake and the solutions, considered priorities to point out to the European Union by the young participants.

The subtopics to deal with, during the two discussion sessions, are the following:

1. (infrastructures) Change of fuels: from fossil fuels to renewable energy sources
2. (behaviours) Energetic consumption reduction

Subtopic1 (infrastructures)_change of fuels: from fossil fuels to renewable energy sources

Description of the problem

Nowadays the burning of fossil fuels, non-renewable resources, covers more than the 86% of primary energy production in the world. Their burning produces carbon dioxide, one of the major greenhouse gases that enhances radioactive forcing and contributes to global warming, causing the average surface temperature of the Earth to rise in response.

The large consumption and the energy production growing demanding generate concerns about fossil fuel supplies: reserves are being depleted much faster than new ones are being formed. These environmental and economic threats generated a growing perceived and political need for the development of renewable and alternative energy sources.

We ask you to identify reasons for and against the topic above, but this is only a first draft. **Please add other reasons by using different points of view**

The reasons for the change

- Renewable energy has an important role to play in reducing Carbon Dioxide (CO2) emissions
- By increasing the share of renewable energy in the energy balance enhances sustainability and helps to improve the security of energy supply by reducing the Community's growing dependence on imported energy sources: oil dependence in particular has led to war, major funding of radical terrorists, monopolization and socio-political instability;
- Renewable energy sources are expected to be economically competitive with conventional energy sources in the medium to long term;
- Renewable energy can be particularly suitable for developing countries (poverty alleviation, education, health).

The reasons against the change

- Two important critical aspects define the use of renewable energies: high costs and low efficacy (because the technology and infrastructure already exist for the use of fossil fuels). Artificial gasoline and other renewable energy sources currently require more expensive production, processing technologies and a rise in the bill, than conventional petroleum reserves. Their efficacy is intermittent and could not satisfy the entire energetic demanding;
- Climate change is, for someone, a giant lie: behind renewable energies there are the big corporations and their economical interests in the development of renewable energies.
- Renewable energies have a negative impact on the landscape and in some cases could be dangerous for the surrounding fauna (as the disposal of photovoltaic panels and wind generators);
- Before investing in renewable energies technologies, the energetic distribution system should be reassessed in order to be suitable for it and to avoid wasting.

What can we discuss about?

We ask you to discuss and compare opinions on the following issues, but this is only a first draft. **Add other issues to discuss, and if possible describe them by using different points of view**

- The use of renewable energies is essential, but it could done only by a serious valuation of the costs and the benefits of the plants. How can we assure this evaluation to be done by our governments?

- An alternative way is the use of coal or of the nuclear energy: mostly of the global research is now concentrated on CCS, that will provide safe and low impact coal stations, but for a important part of the public opinion this option is seen as a step behind.
- Further some countries, as Italy, are seriously taking in consideration to go back to nuclear energy. EU's policy on nuclear energy is based on prevention, while deciding whether or not to use nuclear power is up to Member States. EU's role is to ensure that high standards of safety, security and non-proliferation are observed internationally.
- Legislations are an adequate tool to promote the use of renewable energies or a change in the daily habits is fundamental? and if so, how can we promote it?
- Do we need a more balanced information on energy supplies?
- other issues:.....

Subtopic 2 (behaviours) Energetic consumption reduction

Description of the issue

The world population is growing (UN estimate a growth up to 7.4 billions in 2020). The IEA (International Energy Agency) predicts a yearly 3.1% economical growing, especially due to the development of countries like India and China. Consequently the energy demanding will rise up to 50% in 2020 and the energy supplies will still depend on fossil fuels (renewable energies on their maximum will cover only the 2.8%).

The consequent energetic scenario results outrageous:

- The global consumption of energy will rise
- Fossil fuels will cover the 90% of consumption and the CO2 emissions will rise
- The demand of energy supply of the developing countries will be higher than industrialised countries
- The gap between rich and developing countries will continue.

Benefits coming from renewable energies development will be frustrated by the rising of consumptions. Therefore actions to decrease the energetic consumption are necessary.

The EU, for instance with the IEE (Intelligent Energy Europe) programme, promotes energy efficiency and rational use of energy. Several new measures have been taken: minimum efficiency requirements for energy-using equipment, stronger actions on energy use in buildings, transport and energy generation.

A radical change of direction in the consumption of energy will be possible only by a real and proper revolution in the people's daily habits. It depends on everyone to understand that daily action could seriously arm the environment. By saving energies in their home - starting from replacing light bulbs with energy efficient ones, turning thermostat by just a degree down until opting for houses build or restored with bio architecture criteria to avoid energy waste- people can provide a major change in reducing consumptions and the first step to help the creation of a new environmental consciousness.

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Reasons for energetic consumption reduction

- Energy efficiency reduces emissions
- Energy conservation is the most economical solution to energy shortages
- Energy conservation will guarantee more sustainability to single countries
- The actual economic growth is not sustainable in a long term
- Reducing energy consumption is the only way to stop the consumerist and stressful trend of our days.
- A simply and moderate life style is preferable to an unhealthy and dangerous environments

Reasons against energetic consumption reduction

- Economic growth and development can be achieved only with the increasing of production
- Energy consumptions reductions have few benefits, in term of money savings, comparing to the sacrifices that requires
- Most of energy saving measures require a limitation in the use of white goods like household appliances, and damage mostly housewives and women in general
- It's utopian to believe in the reduction of energy consumptions. The only solution is to increase the energy efficiency by producing more energy.

What can we discuss about?

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People should properly realize that their normal habits are now become dangerous for the environment. There are several ways to decrease the energy consumption: an efficient use of energy could come after a proper lifestyle; higher rates could force consumers in reducing their consumptions; by modifying the processes to avoid waste and so on.

Changing our habits toward a more suitable life style is a difficult goal to reach. Energy is a synonymous of welfare and have improved people's life in so many ways: houses are now fulfil of electrical appliances that allow people to do a lot in a shorter period of time. Finding an agreement on what to give up is not easy. But consumptions reduction doesn't necessarily mean to give up, technologies can now provide a smart use of energy without changing our habits.

If energy efficiency and conservation have so many benefits, why is its use limited? How better the decreasing of energy used can be achieved?

- other issues:.....