



CURRENT LEGISLATIVE ISSUES REGARDING THE USE OF RENEWABLE ENERGY AND IMPLEMENTATION OF HOTEL UNITS ISOLATED IN THIS ISSUE

S. Blaj Brezeanu¹, Gh. Brătucu¹

¹ Transilvania University of Braşov, Braşov, ROMANIA, blaj.sebastian@yahoo.com

Abstract: The paper develops the main legislative restrictions of Romania and the European Union on the use of renewable energy as a substitute energy from non-renewable energy sources classics. It highlights the need for classification of global energy consumption in the phrase 20-20-20, by 2020 to reduce energy consumption compared to 2002 by 20% and 20% of the energy produced at that time come from sources renewable. It noted the expansion of wind turbines in Romania and the European Union introduction of green certificates, which take account of pollutants and the production of green energy.

Keywords: Renewable energy legislation, isolated hotel establishments.

1. INTRODUCTION

The explosive growth of the population of Earth and its need for energy, in the last century led to an uncontrolled development of pollution that power plants using fossil fuels coal, oil or natural gas have caused. Along with other pollutants it came to achieving a very large greenhouse, which in turn is considered the main factor in causing global warming we are witnessing at this time. Concern about the effect of global warming has made several civil organizations from different countries to draw alarm signals and then international bodies to take the initiative towards proposing preventive measures to be adopted voluntarily or later required by countries of the world. This point was achieved international conference in Kyoto that ended with a protocol which was subsequently joined several countries. EU countries have adopted this protocol, including proposals 20-20-20.

2. MATERIAL AND METHOD

Promoting Renewable Energy European Legal Framework

1997 - White Paper on the European Community Strategic Plan

Objective: By 2010, 12% of EC consumption will come from renewable energy

Features:

- Access to the electricity market discrimination;
- Development of new fiscal support measures;
- The use of biomass in transport and production of electrical and thermal energy;
- Promoting RES in construction (buildings where rehabilitation and new construction)

Estimated results:

- 500 000 of roofs and front PV (ECU 1.5 billion)
- 10 000 MW of large wind power
- 10 000 MWh of biomass plants
- Integration of RES in 100 small communities, regions, islands [1].

2002 - The decision to adopt the Kyoto Protocol by the Member States (2002/358 / EC) [2]

Objective: In the period 2008-2012 the Member States will be reduced by at least 8% emissions of greenhouse gases compared to 1990 levels (Carbon dioxide, methane, nitrous oxide, fluorohydrocarbon, freon).

Notifications:

- Globally, the Protocol proposes a 5% reduction in emissions mentioned;
- May 31, 2002: The European Community ratified;
- Protocol entered into force on 16 February 2005.

Signed by:

- 188 countries worldwide have signed and ratified;
- The Protocol was signed by the US but has not been ratified by Congress;
- Do not express any position on the Protocol: China, Taiwan, Afghanistan, Somalia, Vatican, Palestinian Authority

2001 - The EC decision to use RES for producing electricity (2001/77 / EC)

2003 - Directive 2003/30 / EC of the European Parliament and of the Council promoting the use of biofuels and other renewable fuels for transport.

Objective: biofuel use in transport in proportion of 10% the total consumption of petrol and diesel

2005 - Mandating new Member States to respect this decision

2006 - Expansion of the Directive by including Romania and Bulgaria

2008 - EC Communication on energy efficiency COM (2008) 772

The objectives of EU development strategy:

- sustainable development
- security of supply of energy and raw materials
- economic competitiveness

Directive 2009/28 / EC of the European Parliament and of the Council on promoting the use of renewable energy: **Directive 20-20-20** [3]

Purpose:

Respect for international commitments (Kyoto Protocol) by:

- Control of energy consumption in Europe
- The increased use of renewable energy with: energy savings and increased energy efficiency

Directive 20-20-20 Global Objectives, at EU level, By 2020 it will reach these goals simultaneously:

- 20% of global energy consumption will be provided from renewable sources;
- 10% of fuel used in transportation (gasoline and diesel) will be provided from renewable sources;
- Improving energy efficiency by 20%
- The 20% reduction of greenhouse gas emitted into the atmosphere effect.

Application

Establish mandatory national targets in line with a 20% share of energy from renewable sources and a 10% share of renewable energy in transport in Community energy consumption by 2020.

The objective of 10% energy in transport SER is mandatory for each Member State.

The objective of 20% energy from RES will establish differentiated states.

Explaining the objective of 20% energy from RES, differentiated states take into account:

- The starting point (2005) including the existing level of energy from RES and energy mix SER potentials in the Member States;
- Gross domestic product (GDP) of each state;
- The gross final consumption of energy;
- Efforts to date of Member States in the use of energy from renewable sources.

Member States should adopt **National Action Plans** for renewable energy [2].

These plans should provide national targets set by Member States concerning the share of energy from renewable sources consumed in transport, electricity, heating and cooling in 2020.

Also, these plans must be harmonized with **National Energy Efficiency Plans**, so consider reducing energy consumption achieved from implementing energy efficiency measures.

Directive. 2010/31 / EU on the energy performance of buildings (**PEC**)

- It promotes the improvement of energy performance of buildings, taking into account outdoor climatic and local conditions, as well as indoor climate requirements and cost efficiency.

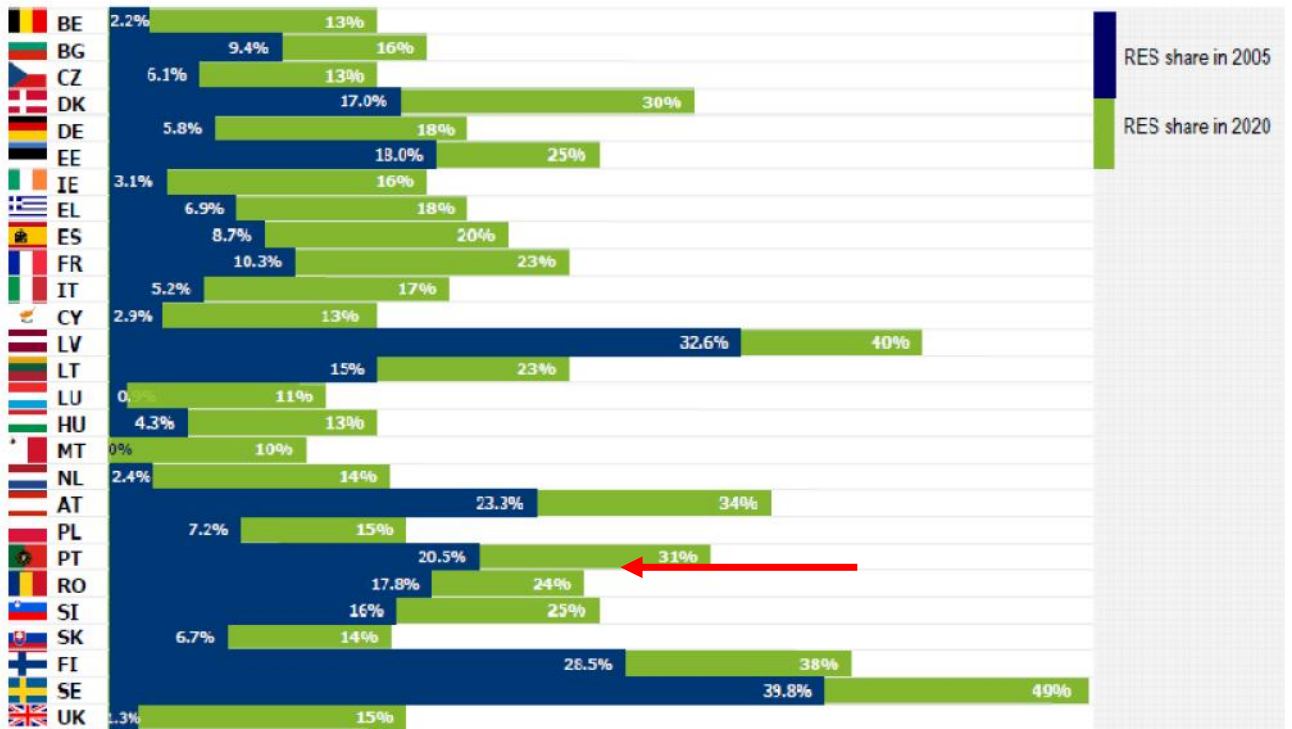
Directive 2012/27 / EU of the European Parliament and of the Council of 25 October 2012 on energy efficiency

Objective: creating the legal framework for policy formulation and implementation National Energy Efficiency in order to achieve the national target of increasing energy efficiency. Measures of energy efficiency policy applies to the whole chain: primary resources production, distribution, supply, transportation and final consumption.

The most important renewable energy legislation is presented above [3].

Targets set at Member State level

Overall objective:% of total consumption of energy from RES



Based on 2005 starting point, recent progress and a balanced sharing of the effort, weighted by GDP/capita

Figure. 1 Overall objective: 20% of total energy consumption comes from SER
[\[http://ec.europa.eu/energy/renewables/transparency_platform/action_plan_en.htm\]](http://ec.europa.eu/energy/renewables/transparency_platform/action_plan_en.htm)

Table.1 Total consumption of energy from RES

Country	According to Directive 1997, %	According to Directive 20-20-20, %	Relative growth, %	Notifications
Hungary	4,3	13	202.3	She made national Plan
Netherlands	2,4	14	483.3	
Austria	23,3	34	45.9	
Poland	7,2	15	108.3	She made national Plan
Romania	17,8	24	34.8	
Slovenia	16	25	56.3	

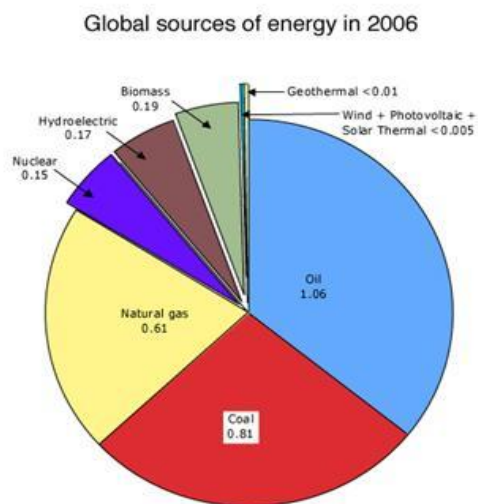


Figure 2 Participation in the world's various energy sources [www.energygroove.net]

World Renewable Energy 2005

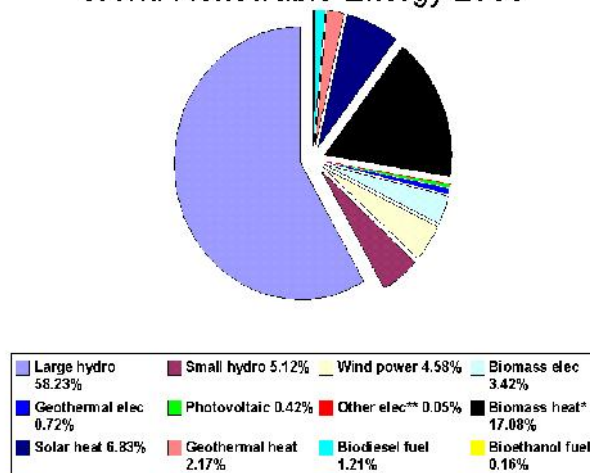
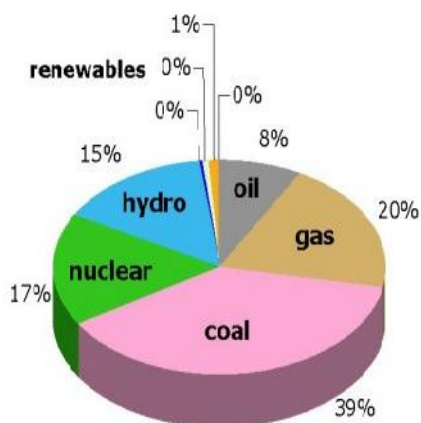


Figure 3 Participation different sources to renewable energy production [www.energygroove.net]

World (2011)
15 tkWhrs/yr
Present Energy Distribution (Power)



World (2040)
30 tkWhrs/yr
A Target Sustainable Energy Distribution by 2040 (Power)

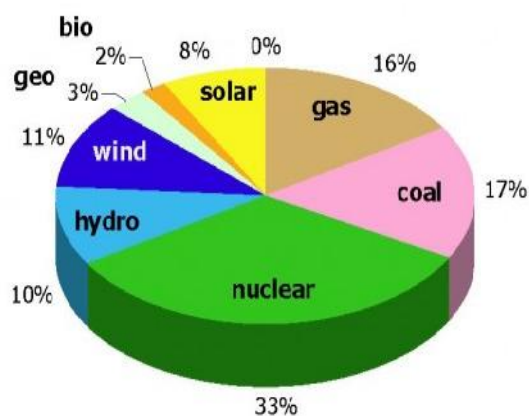


Figure 4 Global energy Demende by Region: 2011-2040 [http://www.forbes.com/sites/jamesconca/2012/05/13/what-is-our-energy-future/]

3 CONCLUSIONS

1. One of the main factors with negative influence on contemporary climate is considered system disorders energy production from conventional sources. This system annually emit significant quantities of CO₂ into the atmosphere, which by the greenhouse effect leading to dangerous climate change for the planet's future.
2. Creating energy independence isolated hotel units is part of a broader framework through which the weight increase energy derived from renewable energy sources in the national and global consumption of energy.
3. The main initiatives to reduce the negative impact of energy from conventional sources were Congress in Kyoto

4. At the moment Romania signed commitments, including the directive that the 20-20-20 by 2020 to reduce energy consumption compared to 2002, and 20% of energy obtained from renewable sources to energy

REFERENCES

- [1] Br tucu Gh., C p î n I., "Renewable energy and energy efficiency of rural tourism farms "in" Mechanization of agriculture ", nr. 9/2007, p.17-22, ISSN 1011-7296
- [2] *** http://www.energie-solara.com.ro/politici_europene.html
- [3] *** <http://eur-lex.europa.eu/legal-content/RO>
- [4] *** http://ec.europa.eu/energy/renewables/transparency_platform/action_plan_en.htm
- [5] *** www.energygroove.net
- [6] *** <http://www.forbes.com/sites/jamesconca/2012/05/13/what-is-our-energy-future/>