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ENERGETIC TARGETS IN RECENT SCENARIOS OF THE INTERNATIONAL LAW

Francesco Buonomenna

Abstract

Il presente studio è volto ad individuare le peculiarità che emergono negli attuali scenari del diritto internazionale con particolare riferimento al recente vertice di Rio+20 del 20-22 giugno 2012 in relazione al settore energia. Come è noto, tale settore si è particolarmente sviluppato negli ultimi anni interessando gli Stati in una prospettiva sempre più allargata rispetto ai confini internazionali. Tale sviluppo ha riguardato sia gli aspetti concernenti l' utilizzo di risorse energetiche alternative a quelle fossili, sia i profili concernenti l'incidenza di tali risorse sulla riduzione delle emissioni di CO_2 ai fini di una maggiore tutela dell' ambiente. Rispetto a tale contesto generale, i paragrafi 125-129 della Dichiarazione, dedicati al tema, individuano ulteriori obiettivi funzionali allo sviluppo sostenibile. L'accesso all'energia e lo sviluppo di servizi energetici moderni si pongono quali ulteriori obiettivi da perseguire, al fine di favorire l'approvvigionamento di energia pulita, di cui possono beneficiare i Paesi in via di sviluppo, ove permangono allo stato attuale territori privi di fornitura energetica. Come può intuirsi i presenti obiettivi si prestano a diverse prospettive di trattazione, anche non strettamente giuridiche. La difficoltà di ricondurre gli obiettivi di Rio in materia di energia (come anche lo stesso settore) ad una rigida regolamentazione normativa appare in tutta evidenza, anche nel presente contributo. Invero, ciò è dovuto al dato che il settore energia si presenta di recente affermazione nella sua sistematicità, rinvenendosi soltanto a livello regionale o sub-regionale una regolamentazione precisa, per lo più incentrata sui regimi di mercato. Per tale motivo la trattazione nel presente studio è stata incentrata sui caratteri normativi che identificano tale settore ricercando un suo fondamento nel diritto internazionale.

This paper presents some remarks on the issues discussed in the recent summit of Rio+20 with regard to the energy sector. During the last years, the energy sector evolved progressively in the direction of a broader context, outside the States national borders. This evolution concerned both the use of energetic resources alternative to fossil ones and the different scenarios deriving from the impact of alternative resources on the reduction of carbon dioxide emissions for the interests of environmental protection. In this context, paragraphs 125 to 129 of the Rio+20 Declaration, specifically devoted to this topic, emphasize additional objectives functional to sustainable development. In fact, the energy access and development of the modern energetic facilities represent the next objectives to be pursued in order to favour the supply of clean energy to the developing countries, where there are still areas devoid of energy support services. These objectives can be discussed from different (and not closely related to the law) treatise perspectives. This contribute reflects the difficulty of connecting the specific objectives of Rio in the field of energy (as the same energy sector) to a rigorous regulamentation. This difficulty arises from the late systematic of the energy sector: only at regional or sub-regional levels, specific regulations, mainly focused on market systems, are present. Therefore, in this study the treatise is focused on the normative aspects of the energy sector by finding its basis in the international law.

Keywords

Risorse energetiche - ampliamento degli obiettivi dell'attuale diritto internazionale - accesso all'energia - lotta alla povertà - servizi energetici moderni

Energetic resources - Broader objectives of the existing international law - Energy Access - Fight against poverty - Modern energy services

ENERGETIC TARGETS IN RECENT SCENARIOS OF THE INTERNATIONAL LAW*

di Francesco Buonomenna

Summary: 1. Introductory scenarios. - 2. Setting the energy sector and its development in International Law. - 3. The energy/environment relationship. - 4. Sustainable energy and poverty eradication. - 5. The central role of modern energetic services.

1. Introductory scenarios

The United Nations Conference on Sustainable Development (Rio+20 Conference), held in *Rio* de Janeiro, Brazil, on *20-22June 2012*, represented an important event aimed at addressing universal themes beyond the regional boundaries of States and organizations. Indeed, one of the most remarkable results achieved by the Rio+20 Conference is the emphasis placed on topics, which were treated only on a partially universal level up to the last decade. In fact, in the past, these issues were not considered in a broad organised context and in some cases not related to sustainable development. In contrast, the energy issue plays a crucial role in the Rio+20 Outcome Document *The Future We Want*[1], even if it was addressed only in a few specific paragraphs (125-129).

Traditionally, the energy issue was related to the use of natural resources and, only recently, the interest of the States has been focused on the environmental impact and the sustainable use of energetic resources. In particular, during the pre-regulatory phase, the regimes regulating the energy use and sources did not have a specific identification, but were merged with the regulatory regime of goods and things, or in other words, of territorial sovereignty rights.

The importance of functionalising energetic resources emerged out of the recent representation of territorial sovereignty, configuring not only internal, but also international legal relations. It was henceforth possible to define a different significance of the use of resources, related to government interactions in always more interdependent ways, which was the necessary precondition for the present energetic cooperation.

The effect of this change can be appraised in the present phase, where additional contents extend to other sectors of interest for the International Community and affect sustainable development as actually conceived. In this logic, the interconnection between environment and energy, functional to the reduction of CO_2 emissions, plays a significant role, as evidenced in the same Declaration (paragraphs127-128).

This interaction progressed through different steps: first, opposing the needs of one sector to the logics of the other; then, in the present phase, it became inter-functional and promoted some objectives more than others, such as the use of alternative energetic sources compatible with the new environmental standards of the post-Kyoto phase.

In paragraph 125 of the Rio 2012 Declaration, the possible impact of the energetic development on the fight against poverty and on the increase of the standards to protect fundamental rights is discussed. In fact, the access to the basic energetic facilities represents a key element to improve the quality of life of the world population living in rural and less developed areas, generally in poverty conditions. Populations isolated from the transport and energy distribution networks, cannot have access to basic energy facilities to satisfy their fundamental needs (buildings, hospitals, schools, transports) mostly. The diffusion of technological models in the framework of modern services (paragraph 126) could offer to developing countries the possibility of using the clean energy coming from abundant energetic resources present at local level.

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* The present contribution, adapted and modified in some paragraphs, was accepted for publication in M. FITZMAURICE, S. MALJEAN-DUBOIS, S. NEGRI (Ed. by), *The Challenges of Environmental Protection and Sustainable Development*, which is in press.

[1] *The Future We Want*, U.N. Doc. A/RES/66/288, 27 July 2012.

In this context, the intensification of programmes, both on national and regional levels, and related energetic policies should be considered (paragraph 127).

The global interest for energetic needs, environmental protection, and sustainable growth of the society shifted quickly the energy sector from a merely national to an international legal regulation, in search for common solutions.

Since the Third millennium, energy has become one of the core interests of the Community of States. The U.N. General Assembly Resolution no. 65/151 of 20 December 2010 and the proclamation of 2012 as the International Year of Sustainable Energy for All (paragraph 129) confirm the importance of the energy sectors. It is useful to recall that it emerges from the above mentioned U.N. Resolution that sustainable energy is the energy produced and used in order to sustain the human development of the present and future generations in all social, economic and environmental aspects.

Beyond the fixed goals of the Rio 2012 Declaration, the profiles inherent in the energy sector represent, in their systematic nature, new developments of the energetic cooperation among the States.

These goals are not exclusively focused on the market (e.g. investment protection, regulation of transport contracts and energy transit), but reflect the instances of the sustainable development, addressed to combine protection needs and valorisation of common goods (preservation of the environment and natural resources) with the high standards for the protection of fundamental rights[2]. This last aspect has a particular relevance in the paragraphs on energy, because access to energy and the use of modern energetic facilities are not only new frontiers of public service, but also useful tools against poverty.

2. Setting the energy sector and its development in International Law

The peculiar profiles emerging from the Rio 2012 Declaration emphasize the importance of the energy sector for the development and the welfare of the modern society. Only recently, questions about the birth and evolution of a possible international law of the energy have been formulated starting from the State-Territory interaction on the activities of resources exploitation. In fact, in the period of Classical International Law, a specific autonomy has been deficient for the regulatory regimes for energy sources and use. They were implicit in the International Law which regulates goods or things, or in other words sovereignty rights on territory and other outer spaces, for which the States legitimately exercised faculties of fruition or powers of use[3].

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2 This scenario is better delineated when considering energetic resources, always closer to be considered as common goods, both for their natural context, impact on natural protection and the satisfaction of interests not referable only to a single state community. In the actual studies, the functionalization of common goods represent an element of particular relevance, considered the strict connection and impact that they can have on human rights (consider the impact of water scarcity in some areas). At the same time, also relevant are the impacts derived from an inadequate environment and ecosystems preservation. In this context, several concepts, which characterize the modern phase, such as the concept of world common good as a good with advantages not limited to a single country, generation or population. The advantages must have a public character (must not be competitive in the consumption and not exclusive) and be universal for the number of involved countries, people and generations. For the development of the characteristics of this different perspective of common goods, see I. GRUNBERG, I. KAUL, M. A. STERN, *Les biens publics mondiaux - La coopération international au XIIe siècle*, Paris, 2002, p. 272 ff.; Y. SCHEMEIL, *Les biens publics premiers: Babel, côté tour et côtéjardin*, in F. COSTANTIN (ed.), *Les biens publics mondiaux - Un mythelégitimateur pour l'action collective?*, Paris, 2002, p. 25 ff.

For a perspective inclusive of the concept of common heritage of humanity, with particular emphasis on natural resources, see M. GESTRI, *La gestione delle risorse naturali d'interesse generale per la comunità internazionale,* Torino, 1996; ID., *I concetti di patrimonio comune dell'Umanità e di risorse d'interesse generale nel diritto internazionale", I beni pubblici tra regole di mercato e interessi generali - Profili di diritto interno e internazionale, Atti del Convegno, Pisa 20 dicembre 2007*, Napoli, 2009.

3 The expression "Law of the Energy", reported in recent legal literature, appears highly complex and heterogeneous due to the breadth and multiplicity of related sectors. This expression started to be used in the last twenty years as coincident with world or global scenarios, capable of offering a unifying synthesis for general or common law regimes, compared to others with a continental or internal impact in the regime of single states, with both public and private perspectives. Authors interested to the topic, for the different national law doctrines: G. KISHORE, *Energy Laws,* New Delhi, 2011; C. KOENIG, J. KÜHLING, W. RASBACH, *Energierecht,* München, 2008; E. MAL, P. MICHEL (eds.), *Le droit à l'énergie*, Colloque International, *Défis et complexités du troisièmemillénaire,* Paris, 1996; M. M. RAMÓN, *Nuevo derecho energetico*, Madrid, 1982. The classical international doctrine appeared always reluctant to find an autonomous both prescriptive and doctrinal statute as compared to the language expression "law of the Energy", considering it more usefully situated in the *lex generalis* of absolute rights on territory and good existing here to be used in the free circulation as goods or things, or vice versa as general or particular use services. The lesson from this classic doctrine concerns the dualism or the dichotomy of each possible energy subject, which can be considered as *res* or *usus*, i.e. exercise and fruition of the faculties, which are derived from the sovereignty-property on this good. See, in this meaning the post war classic works: *ex multis* G. SCELLE*, Droit international public*, Paris, 1946-1947; G. BISCOTTINI, *Diritto*

In particular, the prospective based on the protection of interests started from the legal phenomenon for the protection of territorial sovereignty. The legal consequence of this setting may be found in the UN regime of the permanent sovereignty on natural resources[4], considered as goods capable of producing an economic benefit for the owner States by means of their commercial or industrial management[5]. In this approach, a different configuration of the territorial sovereignty may be envisaged: the territory represents the natural and ancestral legal element relating to the energetic resources order.

The advent of different perspectives, caused also by relevant historical transformations (colonization and de-colonization), represented the starting point for the development of a possible autonomous order for the use of natural resources for energetic or other (*e.g.* military, etc.) goals.

Obviously, it is not absolutely autonomous relating to the theory of goods, which are connected to the territory and then to State context. In the actual phase, a different meaning for the use of energetic resources appears: it is related to State inter-relations giving the premise for an International law of the energy.

With the progressive development of the contemporary society, a different perspective has been associated to the territorial dimension of the resources: it is addressed to emphasize the functional aspect[6] of their use, not only to satisfy the requirements of the statal sphere, but also of broadened and interdependent spaces. This process involved a detailed research of international regulatory regimes deriving from the circulation of energy goods through Energy services.

3. The energy/environment relationship

Sustainable development, based on the equilibrium between environment and economic growth in the green economic framework, was an important issue of Rio+20[7]. In this equilibrium the Energy/Environment relationship plays a crucial role. The evolutive phases of this relationship were several: the first one was characterized by conflicting needs, whilst at present the relationship is inter-functional[8]. During the industrial revolution, the energetic interest consisted in technical development,

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amministrativo internazionale, in G. BALLADORE-PALLIERI, G. MORELLI, R. QUADRI (a cura di), *Trattato di diritto internazionale,* Tomo Primo, Padova, 1964.

[4] The universal convergence of these profiles found its first expression in two peculiar documents: the Resolution of the U.N. General Assembly of 14 December 1962, n. 1803-XVII concerning the Declaration on permanent sovereignty on natural resources and the Charter of economic rights and duties of States (resolution of 12 December 1974, n. 3281-XXIX), in which was central the statement reported in article 2, first paragraph "Every State has and shall freely exercise full permanent sovereignty, including possession, use and disposal, over all its wealth, natural resources and economic activities".

[5] For a close examination of the natural resources notion, addressed to evidence the legal peculiarities of a possible identification different from the territorial basis, see I. BROWNLIE, *Legal status of natural resources in the international law (some aspects)*, *Recueil des Cours de l'Académie de Droit International de La Haye*, The Hague, 1979, p. 245; G. ABI-SAAB, *La souveraineté permanente sur les resources naturelles,* in M. BEDJAONI, *Droit international. Bilan et perspectives*, Paris, 1991, p. 641.

[6] The evaluation of energy goods in the actual phase is strictly related to its use. In this context, the access to energy may be interpreted both as human need as reported in the Rio Declaration and as the affirmation of the State as owner of the energetic resources. This last aspect is not secondary, considered that the problems and the theoretical applications related to resolutive criteria for disputes over the ownership of the resources emerged in the recent debates on the energetic resources in the Artic, Antarctic and Black Sea. Differently from the territorial conquests of previous times, the territory configuration raises to autonomous relevance not as good, but as ability to produce additional goods, generating mainly energetic interests, not secondary for the maintenance of the leadership, juxtaposed to collective needs of environmental protection. For these last aspects, see G. ANDREONE, *L'océan Arctique être reviviscence des politiques étatiques et recherche d'un cooperation international renforcée: quell régime de protection pour son environnement?,* in G. ANDREONE, A. CAGLIURI, G. CATALDI, (sous la dir.), *Droit de la mer émergences environnementales. Law of the Sea and Environmental Emergencies,* Naples, 2012, p. 323 ff. For the problems connected to ownership of the energetic resources in the Black Sea, see the recent reconstruction of G. A. OANTA, *La Unión Europeariberеña de un nuevo mar: el Mar Negro, in Estudios de derecho internacional y derechoeuropeo en homenaje al professor Manuel Pérez Gonzáles,* Tomo II, Valencia, 2012, p.1705 ff.

[7] For a close examination of the sustainable development peculiarities with particular attention to the energy sector, see S. QUADRI, *Energia sostenibile. Diritto internazionale, dell'Unione europea e interno*, Torino, 2012; F. VETRÒ, *Sviluppo sostenibile e problemi dell'energia*, in A. POLICE, A. CRISMANI(eds.), *Scritti in onore di Maria Luisa Bassi*, Napoli, 2011. For a broad construction of the green economy notion, intended a same functional to the sustainable development promotion, see P. ACCONCI, *La green economy e la realizzazione dei diritti dell'uomo alla base dello sviluppo sostenibile*, in *DUDI,* 2012, p. 587 ff.

[8] The inter-functional character of this relationship may be found in the normative choices which are present both in art. 19 of the Energy Charter Treaty (Lisbon, 17 December 1994, in force 16 April 1998) and in arts. 192 and 194 of Treaty on the Functioning of the European Union (Lisbon, 13 December 2007, in force 1 December 2009). For an in-depth analysis of the normative sources also in relation to the environment/energy relationship, see M. MARLETTA, *Energia. Integrazione europea e cooperazione internazionale*, Torino, 2010, p.

necessary for the improvement of the quality of life and as an affirmation of state communities in the international framework, and was of primary interest if compared to environmental protection.

Only after industrial accidents with severe polluting impacts on the natural reserves (at the beginning, water and maritime resources) arose the awareness that such reserves are an essential heritage for the present and future generations.

In this way, the protection of the environment became an important component of the international policy of the States, with the awareness of the possible global impact of environmental accidents, which might produce adverse effects beyond national borders, although caused by localized events[9]. This last aspect determined a drastic change in the legal approach to questions concerning the use of energetic resources by States, in particular water, mineral and gas resources: the protection of the environment represents, in this phase, a limit to the unreserved economic development of the States.

In this context, various principles of environmental law were affirmed, such as the modern concept of sustainable development, which was the object of several legal tools, approved by the United Nations Conference on environment and development, held at Rio de Janeiro in June 1992.

Since then, the need to affirm the compatibility between the economic development of States and the protection of the environment (Kyoto's Protocol, 16 March 1988 and Johannesburg summit, 26 August 2002), strongly appears, enhancing both the technological development to favour the CO_2 emissions reduction, coming from the use of traditional fossil fuels, and the use of renewable energy sources, compatible with the new environmental standards[10].

The final document of Rio+20 is addressed to these goals in some points of paragraphs 127-128.

In particular, the Governments declare (paragraph 128): "we reaffirm support for the implementation of national and subnational policies and strategies, based on individual national circumstances and development aspirations, using an appropriate energy mix to meet developmental needs, including through increased use of renewable energy sources and other low-emission technologies, the more efficient use of energy, greater reliance on advanced energy technologies, including cleaner fossil fuel technologies, and the sustainable use of traditional energy resources".

In addition, in the next paragraph it is reported that «we recognize that improving energy efficiency, increasing the share of renewable energy and cleaner and energy-efficient technologies are important for sustainable development, including in addressing climate change. … We also recognize the importance of promoting incentives in favour of, and removing disincentives to, energy efficiency and the diversification of the energy mix, including promoting research and development in all countries, including developing countries».

In the new scenario, the characteristics of the energy/environment relationship are well emphasized: this relationship is not exclusively based on renewable sources, but includes all the technological supports in order to develop energetic efficiency based on the combined use of renewable energy and fossil sources.

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351 ff.; ID., *Il Trattato di Lisbona e gli sviluppi nel settore dell'energia, Quaderni europei*, Rivista *online*, Serie energia, n.2, 2012, p. 10 ff., available at *http://www.lex.unict.it/cde/quadernieuropei/energia/interno_energia.asp*.

9 The legal literature on international environmental law, born in the last thirty years and related to the relationship environment/energy starting from the protection of natural resources, is very broad. Therefore, in the present work, only some recent general references are cited, missing out the reference to the several contributions focused on single general principles of environmental protection. See M. PRIEUR, *Droit de l'environnement*, Paris, 2011; I. CARACCIOLO, *Gli strumenti convenzionali internazionali in materia di protezione dell'ambiente: la protezione dell'atmosfera*, in U. LEANZA, I. CARACCIOLO, *Il diritto internazionale: diritto per gli Stati e diritto per gli individui,* Torino, 2010; P. BIRNIE, A. BOYLE, C. REDGWELL, *International law and the Environment* , Oxford, 2009; A. FODELLA, L. PINESCHI, *La protezione dell'ambiente nel diritto internazionale*, Torino, 2009; M. FITZMAURICE, *Contemporary Issues in International Environmental Law*, Cheltenham, 2009; T. SCOVAZZI, *I principi generali del diritto internazionale dell'ambiente*, in S. NESPOR, A. L. DE CESARIS (eds.), *Codice dell'ambiente*, Milano, 2009; G. CORDINI, P. FOIS, S. MARCHISIO, *Diritto ambientale, Profili internazionali europei e comparati*, Torino, 2008; A. DEL VECCHIO, A. J. DAL RI (eds.), *Il diritto internazionale dell'ambiente dopo il vertice di Johannesburg*, Napoli, 2005.

10 In the final declaration of the Aquila Summit of July 2009 emerges a progressive care for the realization and reduction of emissions in the contest of sustainable development. In fact, in the declaration of the leaders of the major economies is reported: «We recognize the scientific view that the increase in global average temperature above pre- industrial levels ought not to exceed 2 degrees C. In this regard and in the context of ultimate objective of the Convention and the Bali Action Plan, we will work between now and Copenhagen, with each other and under the Convention, to identify a global goal for substantially reducing global emissions by 2050». For a systematic setting of L'Aquila G8 summit and Copenaghen Conference of the same year in the above cited prospective, see E. DI GIULIO, *Copenaghen: dopo la semina il raccolto*, in *Energia,* n. 3, 2009, pp. 54-63.

Moreover, these aspects were at the core of several specific studies, which high lighted how the energetic efficiency cannot be obtained only by addressing the interest exclusively to renewable energy sources, because fossil fuels are constantly used[11].

It is contended that neither the moderate installation rate of the renewable energy plants (wind, solar, salinity gradient, biomass, etc.) nor their immediate and short period ability of producing energy in a competitive way are enough to make renewable energy sources challenging for the price of energy from fossil sources[12].

These criticisms on all the renewable energetic sources make their development impossible at a rate able to satisfy the incremental demand of energy for the first half of this century.

In particular, the field of renewable energy sources is at early stages for various States, but in expansion due to both the government economic support, indispensable to reduce the production costs, and the availability of the consumers to pay green energy at an higher price compared to the cost of fossil fuels[13].

Therefore, the attention will be focused on a rapid implementation of technologies related to CO_2capture and storage, combined with a policy of sustainable consumptions which will favour fossil fuels with reduced environmental impact (*e.g.* natural gas)[14].

These aspects represent a necessary goal to pursuit because renewable energy sources cover about 30% of global energy consumptions and therefore cannot be considered the substantial solution for the reduction of CO_2 emissions.

4. Sustainable energy and poverty eradication

In addition to the challenge of climate changes, there is another challenge which Rio+20 Conference defined in the outcome document "The future, which we want" as the most important global challenge that the world must face: the reduction of poverty, a necessary condition for sustainable growth, which considers ethical and social aspects, and not only the economic aspect, as its pillars[15].

One constitutive element of the poverty in most countries is the energetic poverty, in a context where 2 billion people live, a number expected to rise up to 3 billion by 2030, constituted mainly by communities of Sub-Saharian Africa, India, South East Asia.

The energetic poverty can be defined as the lack of access to adequate and reliable forms of energy at affordable prices to satisfy the primary needs of persons, such as to eat, to heat their home, to be treatable and to move. Sustainable energy for all means works for the double goal of reducing the poverty and allowing an appropriate development of the environment and climate[16].

This goal corresponds to "the inclusive growth", recently discussed in the report of the World Bank entitled "Inclusive green growth: the pathway to sustainable development"[17].

These issues are particularly important in the world scenario, considered that the United Nations General Assembly last year declared 2012 year the International Year of Sustainable Energy for All. In doing so, the General Assembly noted "the efforts of the UN system to work toward ensuring

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[11] For a general setting, it should be considered that coal has met nearly half of the rise in global energy demand over the last decade, growing faster even than total renewables. Whether coal demand carries on rising strongly or changes course will depend on the strength of policy measures that favour lower-emissions energy sources, the deployment of more efficient coal-burning technologies and, especially important in the longer term, CCS. See IEA, *Will coal remain a fuel of choice?,* World Energy Outlook 2012, p.5. See also G. MORITIS,*CO_2 Sequestration Adds New Dimensions to Oil and Gas Production, Oil and Gas Journal,* n.101*,* 2003, pp. 39-44.

[12] For a development of these scenarios, see P. ODELL, *Uno scenario realistico sul futuro energetico,* in *Energia,* n. 2, 2010, pp. 2-13ff.

[13] Some of these criticisms were well evidenced by IEA, in the World Energy Outlook 2012 by affirming that the rapid increase in renewable Energy is underpinned by falling technology costs, rising fossil-fuel prices and carbon pricing, but mainly by continued subsidies: from $88 billion globally in 2011, they rise to nearly $240 billion in 2035. Subsidy measures to support new renewable energy projects need to be adjusted over time as capacity increases and as the costs of renewable technologies fall, to avoid excessive burdens on governments and consumers.

[14] See IEA, *Different shades of gold for natural gas,* World Energy Outlook 2012, p.5.

[15] See C. CARRARO, *La sfida globale alla povertà energetica*, International Center for Climate Governance (ICCG), 1 March 2013, available at *http://www.carlocarraro.org/argomenti/energia/la-sfida-globale-della-poverta-energetica/*.

[16] See C. CARRARO, *2012 anno dell'energia sostenibile per tutti*, International Center for Climate Governance (ICCG), 25 May 2012, available at *http://www.carlocarraro.org/argomenti/energia/2012-anno-internazionale-dellenergia-sostenibile-per-tutti/*.

[17] Available at *http://www.worldbank.org.*

energy access for all and to protect the environment through the sustainable use of traditional energy resources, cleaner technologies and newer energy sources." In addition, the General Assembly, in deciding to organize the UN Conference on Sustainable Development in 2012 (Rio+20), decided that one of the main topics of the conference would be "a green economy in the context of sustainable development and poverty eradication" – for which sustainable energy must be a central element.

Particularly remarkable is also the launching by the UN Secretary-General Ban Ki-moon of the initiative on "Sustainable Energy for All", which is aimed at bringing all key actors to the table to make sustainable energy for all a reality by 2030. According to his views: "Reaching this goal will require action by all countries and all sectors to shape the policy and investment decisions needed for a brighter energy future. Industrialized countries must accelerate the transition to low-emission technologies. Developing countries, many of them growing rapidly and at large scale, have the opportunity to leapfrog conventional energy options in favour of cleaner energy alternatives that will drive growth and enhance economic and social development. Three linked objectives underpin the goal of achieving sustainable energy for all by 2030:Ensuring universal access to modern energy services; Doubling the rate of improvement in energy efficiency; Doubling the share of renewable energy in the global energy mix. These three objectives, each one important in its own right, reinforce each other in many instances: increasingly affordable renewable energy technologies are bringing modern energy services to rural communities where extension of the conventional electric power grid would be prohibitively expensive and impractical. Increased efficiency in the production and use of electricity relieve strained power grids, allowing them to reach more households and businesses. All energy sources and technologies have roles to play in achieving universal access in an economically, socially and environmentally sustainable fashion. Achieving the three objectives together will maximize development benefits and help stabilize climate change in the long run. Several initiatives have been undertaken to favour the goal of sustainable energy for all".[18]

On going initiatives also include Energy for All (Asian Development Bank), the Clean Energy Ministerial, the Low-Emissions Development Strategies (LEDS) Global Partnership, Lighting Africa (World Bank Group), Energy+ (Norway), Energy for the Poor (OPEC Fund for International Development), the Paris-Nairobi Climate Initiative, the Africa-EU Energy Partnership, the Small Island Developing States Sustainable Energy Initiative, the Global Alliance for Clean Cook stoves, as well as the EU's decision to make access to sustainable energy a development priority through its "Agenda for Change".

The private sector will also be central in achieving the goal of sustainable energy for all. Leaders of business and industry can contribute by making their companies and practices and supply chains more efficient, and by joining in public-private partnerships to expand the deployment of sustainable energy products and services[19].

5. The central role of modern energetic services

The goal of allowing access to energy by means of modern energetic facilities is functional to the fight against the energetic poverty (paragraph 126).

This aspect may be considered the result of the evolution of the concept of "universal service", addressed to signal the need of identifying a sole universal or global network derived from the group of "segments" at continental or sub-continental level.

In this way it should be avoided that regions of the world are left without supporting energetic networks, capable of guaranteeing their economic and energetic competitiveness with other regions[20].

Moreover, the developments of an integrated energetic legal regulation, shared between the nation allow of the territorial state and the international law of common energetic areas, open interesting perspectives for the analysis of the present public service configuration and the explanation

[18] See BAN KI-MOON, *A Vision Statement*, Sustainable energy for all, November 2011, available at *www.sustainableenergyforall.org.*

[19] See *Actions Commitments. Sustainable Energy For All,* at *www.sustainableenergyforall.org.*

[20] Specification of law frame for oil gas can allow the return to the origins of these resources as *res in transitu, characterized* by the fixity of transport nets and the mobility of transported products see G. SCHELEGEL, *Le Régime juridique du transport international de l'énergie par voie de canalisation,* Paris, 1963.

of the law of new technologies with particular tasks for the public and private subjects, responsible for a service defined as "universal public service". Our opinion is that the perspective of a universal public service implies a choice of governance in the harmonization and coordination of optimal energetic areas, which compensate for the differences of energetic resources and technological skills, existing among these areas. In this sense, the universal public service represents a third and last degree of development as compared to the international and national public service[21]. Analysing the various parts or the single sectors belonging to the broader concept of universal Public Energy service, it can be observed that it is identified on the basis of traditional international laws, customary and conventional, and above all, on the basis of new market laws of the interconnected regional and sub-regional nets. Legal rules, coinciding with organizations and international groups of States with variable multilateral sizes, are appropriate to the level of regional and sub-regional markets to regulate. This perspective is evident in the Rio2012 Declaration, signalling the need of both guaranteeing the modern service existence for those populations, concentrated in the regional areas in poor circumstances, and strengthening the present services in different areas[22]. In the first scenario, it is important to take into account that the access to modern energetic services from developing countries is fundamental to reduce the poverty and to improve the life conditions and standards for the majority of the world population.[23] One of the key elements for the sustainable development promotion, focused on the rise of the human rights protection standards, is that modern energetic services should be available in rural areas or in areas where the energy supply appears economically inconvenient. Otherwise, the second scenario is addressed to the strengthening of existing services in a dimension of sustainable development, highly focused on environmental standards, and favouring investments in the clean energy sector. In this context, Rio+20 represented an important opportunity to demonstrate the relevance of the profiles related to the energy sector and to favour concrete answers from States, encompassingprivate stakeholders. Certainly, among the possible actions, the prearrangement and strengthening of modern energetic services play a peculiar role. This is due to the fact that they combine specific objectives of the public service with those reflecting the characteristic needs of sustainable development. The attention devoted to the strengthening of the existing services in the perspective of reducing CO_2 emissions reveals the modern character of these Energy services.

[21] On this last aspect and the theoretical perspectives of the subject we dare refer to F. BUONOMENNA, *Servizi pubblici internazionali ed europei. Regimi regolatori*, Salerno, 2010.

[22] For a close examination of the impact produced by energetic services on the fight against poverty, see V. DELFINO, E. DI GIULIO, M. GIULIANI, *Rio+20: l'impasse della sostenibilità. Alcune riflessioni numeriche*, in *Energia*, n. 4, 2012, p. 28 ff.

[23] The achievement of the Development Goals of the Millennium, the eight goals that the UN member States committed to honour by 2015, depends for the most part on a broad and sustainable energetic supply.