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*María del Mar Hidalgo García*

**Climate Change: a shared but  
differentiated responsibility**

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## **Climate Change: a shared but differentiated responsibility**

### **Abstract:**

2015 is a key date on the international political agenda. In December the twenty-first meeting of the Conference of States Party (COP21) will take place in Paris. A new international agreement must be approved to replace the Kyoto Protocol in order to avoid that the planet's temperature does not rise above 2 ° C as agreed in Qatar at the end of 2012. The text is being prepared by the "Ad Hoc Working Group on the Durban platform". This year, this group is going to hold a series of meetings that should culminate with a document to be approved in Paris.

### *Resumen:*

*El 2015 tiene una fecha clave en la agenda política internacional ya que en diciembre tendrá lugar la vigésima primera reunión de la Conferencia de Estados Parte de la Convención sobre cambio climático (COP) en París. En ella se debe aprobar un nuevo acuerdo internacional que sustituya al protocolo de Kyoto para conseguir que la temperatura del planeta no aumente por encima de los 2°C, tal y como se acordó en Qatar a finales de 2012. El texto está siendo elaborado por el "Grupo de Trabajo especial sobre la Plataforma de Durban" y para ello, a lo largo del este año, van a tener lugar una serie de reuniones que deben culminar con un documento que será aprobado en París.*

### **Keywords:**

COP21, climate change, Kyoto Protocol, Greenhouse emissions.

### *Palabras clave:*

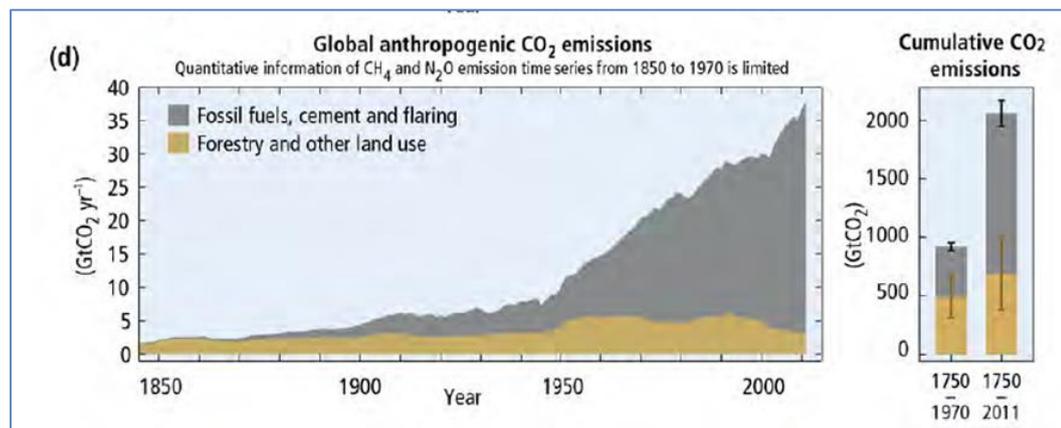
*COP21, cambio climático, Protocolo de Kyoto, gases de efecto invernadero.*

## The roadmap for a new agreement

2015 seems to be a critical year to set up the path to follow in the fight against climate change. The Kyoto Protocol expires in 2020, yet before that the international community will have to be capable of creating a new agreement to replace it. There has not been any consensus so far on whether it will consist of a protocol, a legal instrument or a legally binding agreement within the framework of the Convention.

The Kyoto Protocol, which came into effect in 1997 and was valid for a period of 5 years, differentiated A countries and B countries. Economies in transition and industrial countries were part of the former, whereas the latter was formed by developing nations. A countries had to reduce greenhouse gases emission to the levels they had in the 1990s, although reduction targets were different according to each country, going from 5% to 10%. In 2012, expiration date, the validity of Kyoto Protocol was extended until 2020 under the possibility of negotiating new objectives. Kyoto Protocol was kept alive in spite of counting on less supports, since Japan, Russia en New Zealand did not sign the extension. In the same year, Canada withdrew from the Protocol.

Experts point out that acting against climate change cannot be delayed any longer since any delay would make it more difficult to achieve the IPCC established objectives. In spite of the effort made throughout the last decades to reduce greenhouse gas emissions, they have experienced an increase, to the point of reaching unprecedented levels for the past 800,000 years<sup>1</sup>.



Source: <http://www.ipcc.ch/report/ar5/wg3/>

<sup>1</sup> [http://www.ipcc.ch/news\\_and\\_events/docs/COP19/COP19\\_final\\_presentation.pdf](http://www.ipcc.ch/news_and_events/docs/COP19/COP19_final_presentation.pdf)

According to the 5<sup>th</sup> IPCC report, it is highly possible that an observed increase in temperature on the planet between 1951 and 2010 has had something to do with human activity<sup>2</sup>. According to the report, exceeding the 2°C increase regarding preindustrial levels would have catastrophic consequences. Reaching the objective of not exceeding such an increase is difficult, yet not impossible, experts argue. On that purpose, GHG concentrations would need to be limited to around 450 ppm. Bearing in mind the accumulative effect, not exceeding the 450 ppm limit may require reducing the effects of greenhouse gases from 40% to 70% in 2050 up to 100% by 2100<sup>3</sup>.

In December 2014, the States Parties of the Convention on Climate Change met at Lima for the twentieth time for the purpose of beginning a draft of new agreement to be debated in December 2015 in Paris. Reaching an initial agreed text was not easy but it was achieved. A 38-page text emerged from the meeting and meant the beginning of all negotiations. It was also agreed which countries had to send their plans and objectives of reduction until 2020<sup>4</sup>. In order to do so, a website is going to be edited for countries to fulfil such information transparently during the first half of 2015. The Ad Hoc Working Group on the Durban Platform will be in charge of negotiations for the final draft. A few meetings were scheduled for February, June, September and October 2015.

According to the determined timeframe, a first meeting to debate the text took place from 8 to 13 February 2015. It resulted in a document which has growingly increased the content, having now 86 pages<sup>5</sup>. There are people for and against such an increase in pages. The ones in favour, such as Christiana Figueres, argue that all options and suggestions made by all countries under the criteria of shared but differentiated responsibility are now referred to in the text. In turn, EU representatives<sup>6</sup> point out that an increase in pages makes negotiations more difficult, more accuracy being necessary.

### **An expansive text**

When analysing the text, the first remarkable thing is the several drafting options. Some points are redundant and therefore their inclusion in the final text does not seem to be a problem. However, disagreements will be the main point of the debate in future meetings since they show different levels of ambition.

While some proposals refer to keeping the historical responsibility of developed countries, others talk about a shared but differentiated responsibility, taking into consideration each nation's capacity. In regards to mitigation percentages there are four options— first, as IPCC says, reducing all emissions from 40 to 70% by 2050; second, a 50% reduction by 2050; third, not giving an exact number but rather

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<sup>2</sup> [http://www.ipcc.ch/report/ar5/syr/docs/ar5\\_syr\\_headlines\\_en.pdf](http://www.ipcc.ch/report/ar5/syr/docs/ar5_syr_headlines_en.pdf)

<sup>3</sup> Ibid.

<sup>4</sup> En inglés: "Intended Nationally Determined contribution"

<sup>5</sup> [http://unfccc.int/files/bodies/awg/application/pdf/negotiating\\_text\\_12022015@2200.pdf](http://unfccc.int/files/bodies/awg/application/pdf/negotiating_text_12022015@2200.pdf)

<sup>6</sup> <http://www.euractiv.com/sections/eu-priorities-2020/cop-21-negotiations-kick-geneva-311948>

relating the purpose to the gained scientific knowledge; and fourth and most ambitious, diminishing by 70-95% the 2010 emissions by 2050.

On the other hand, the text provides for the possibility of not establishing a specific reduction target, giving more leeway to States Parties. The only requirement is not experiencing a 2°C planet-wide temperature increase with respect to preindustrial levels.

Those points of view are an example of the multiple draft options. Some have compared it to a 'Christmas wish list'<sup>7</sup>, since all suggestions have been collected, even the most ambitious ones, with the creation of an Environmental International Court of Justice proposed by Bolivia.

Text reviewers have hard work to do from now on. There are several proposals on the table and getting a concise, negotiable text will not be easy. The final text must be ready by May in order to be debated in the next Working Group in June.

### **The new agreement must reflect the changes made since 1997**

There have been significant changes since the entry into force of the Kyoto Protocol 22 years ago that must be taken into account in the agreement of a new regulatory framework.

The first fundamental doubt that arises is determining whether the fight against climate change must be focused from a national or global perspective, as Christiana Figueres pointed out in 2002<sup>8</sup>. Such dichotomy is even more evident today since climate change has progressively become an economic and security issue more than a strictly environmental one. Climate change is now on every world leader's agenda.

Moreover, climate change has revealed the gap between those responsible for it and those affected by its consequences. Developing countries are the most vulnerable, the least responsible and the ones with the least means to develop projects for adaptation.

In 1990, developing countries accounted for one-third of those greenhouse gas emissions. However, today they are responsible for 55% of emissions and if they continue their current annual growth they will account for 70% world's greenhouse gas emissions<sup>9</sup>. Consequently, the difference between developed and developing countries that was established in Kyoto Protocol does not seem to be fair in some cases. The new agreement must consider such a situation.

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<sup>7</sup> According to Tosi Mpanu Mpanu, Republic of Congo's representative

<sup>8</sup> Maria Ivanova and Christiana Figueres. "Climate Change: National Interests or a Global Regime?" Global Environmental Governance: Options & Opportunities". New Haven, CT: Yale School of Forestry & Environmental Studies, 2002. 205-224. Disponible en: [http://works.bepress.com/maria\\_ivanova/5](http://works.bepress.com/maria_ivanova/5)

<sup>9</sup> 5<sup>a</sup> IPCC Climate Change 2014 Report. Mitigation of Climate Change.

Another change that is to be highlighted is the contribution of other sectors to greenhouse gas emissions. It is continuously stated that climate change affects food security in the least developed countries. Nevertheless, it must be considered that an important amount of the increase of greenhouse gas emissions is due to the agricultural sector and to land use change. For that reason, both the industrial and the agricultural sector must be borne in mind when contemplating mitigation. The latter can also explain changes in the world population eating habits. During the next 35 years it will be necessary to increase food production at least by 60% in order to feed the world's population -9 billion people by 2050<sup>10</sup>. Such a scenario must be compatible with the fight against climate change.

In turn, the economic crisis that began in 2008 has revealed the importance of not questioning countries' competitiveness due to their fight against climate change. The European Union has always been very committed to the fight against climate change but now is working considering the competitiveness of its economy and energy security defined by EU's dependence on external supply. In its 2030 Plan, the European Union establishes its objectives in terms of climate and energy in favour of a competitive, safe and low-carbon economy<sup>11</sup>. The EU is committed to a 40% cut in greenhouse gas emissions as well as to a 27% increase in clean energies, including nuclear energy, by 2030.

A setback to nuclear energy after the Fukushima accident is another new parameter, since it questioned the security of nuclear energy at a world scale. Some nations such as Germany renounce to include nuclear energy in a future in their 'energy mix', boosting renewable energies to reach a low carbon economy. Other countries like China examined the security plan in both their functioning plants and the plants under construction. Such examination concluded that nuclear energy is an important part of their 'energy mix' group of clean energies. Far from leaving its nuclear plans, China has launched a policy on "developing nuclear power in a safe and efficient manner". Nuclear energy sustains the rapid economic growth in China, which annual rate growth is around 7-8%, especially in the eastern and southern coastal areas. Currently, there are 20 units in operation with a total capacity of 17.86 GW, and 28 units are under construction with a total capacity of 30.41GW<sup>12</sup>.

In the case of Japan, as a user of nuclear energy, greenhouse gas emissions went up to around 70Mt<sup>13</sup>, in spite of all efforts made in energy efficiency in the use of fossil fuels to replace the decrease in nuclear supply after Fukushima.

In turn, evidence shows the existing link between energy security and climate change. Development on fracking techniques throughout the last decade facilitates the exploitation of new fossil fuel deposits. Such fossil fuels will allow some countries to diminish their energy dependence, such as the US, that can become an energy exporter. However, the debate on energy security and climate change is opened

<sup>10</sup> <http://www.fao.org/forestry/15538-079b31d45081fe9c3dbc6ff34de4807e4.pdf>

<sup>11</sup> [http://ec.europa.eu/clima/policies/2030/index\\_en.htm](http://ec.europa.eu/clima/policies/2030/index_en.htm). Fecha de consulta 12 de febrero de 2015

<sup>12</sup> <https://www.iaea.org/newscenter/news/how-they-do-it-china>. Fecha de consulta 12 de febrero de 2015

<sup>13</sup> Ibid.

again, given that fossil fuels do not contribute to the development of clean energy. Obama was criticised for not keeping his promises on fighting climate change when he announced that the US would achieve energy self-sufficiency. And now Obama is working on the construction of oil pipeline Keystone in order to transport oil from Canada, pointing out his environmental responsibility. Having passed the project at the Senate, democrats have blamed Obama for undermining the interests of US citizens for not investing in the future but rather in territories in conflict.

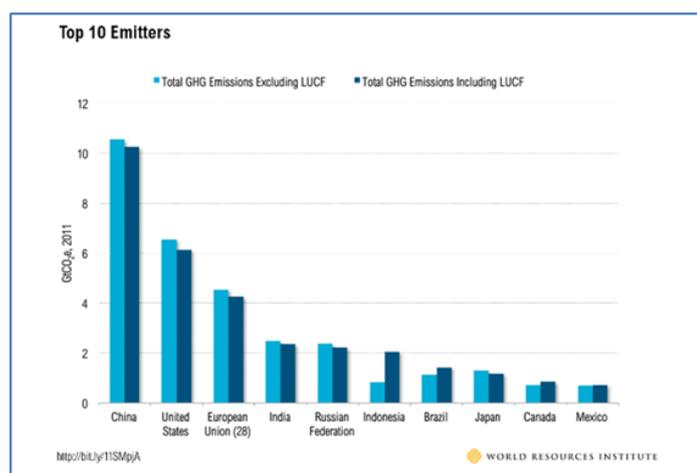
On the other hand, support for reducing the emissions through the implementation of economic measures will help in the fight against climate change. An example of this situation is the progressive removal of fossil fuel grants, contributing to the implementation of energy efficiency measures. This economic measure would prevent around 360 Mt CO<sub>2</sub> emissions<sup>14</sup>.

### A new negotiating framework in the geopolitical field

As Christiana Figueres<sup>15</sup> pointed out in 2002, there are four main questions that should be answered if we are to find a solution in the fight against climate change:

- Who are responsible for it?
- Who are affected by it?
- Who should act?
- What should it be done?

According to the World Resources Institute, only 9 countries apart from the EU produce 70% greenhouse gas emissions worldwide. Only the USA and China are responsible for 50% of it. Thus, and even though we are all responsible for climate change, it is reasonable to believe that some commitments have a greater weight than others.



Source: World Resources Institute

<sup>14</sup> World Energy Outlook. 2013. IEA

<sup>15</sup> Maria Ivanova and Christiana Figueres. Opus cit.

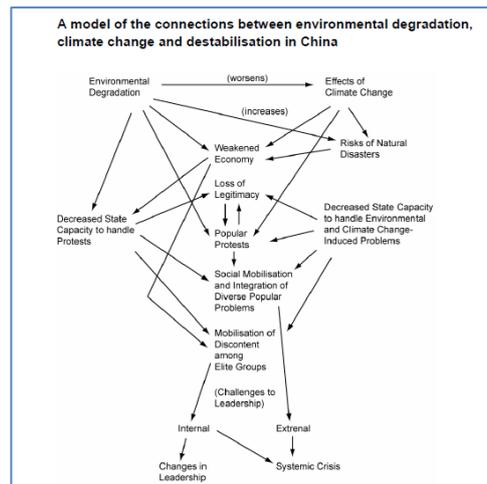
Assuming such commitments is a matter of geopolitics more than solidarity. A clear example of this is found at the Chinese-US agreement signed in November 2014. Being aware that they are the two world largest economies and also the greatest energy consumers and greenhouse gases emitting countries, China and the US have assumed their responsibility in leading the global fight against climate change. Consequently, China moved from its role of a developing, not included in the Annex of Kyoto Protocol country to play a leading and coherent role.

The Chinese-US agreement has been criticised by some countries given that they believe that such negotiations do not consider the principle of 'a shared but differentiated responsibility', since the views of third countries on the reduction of greenhouse gases were not taken into account. However, it means great progress in all future actions taken in the fight against climate change. Christiana Figueres sees this agreement as a political impulse towards the consecution of a new agreement in Paris as well as a very positive step in the prevention of global warming.

The US commits itself in the Chinese-US agreement to reduce the 2005 greenhouse emissions 28% by 2025, while China seems to reach its peak in global dioxide carbon emissions in 2030. In the same year, China will also increase non-fossil energy sources by 20%. There is also an interest in developing energy cooperation programmes. The Chinese-US agreement is also open to cooperation in research in advanced technologies of carbon, nuclear and renewable energies and gas, which allow both countries to optimise the 'energy mix' to manage to achieve the emissions reduction while looking towards free-carbon sources. Both China and the US have committed themselves to cooperate in a copper storage project

Another aspect to be highlighted of the Chinese-US agreement is the proposal of launching a 'Climate-Smart/Low Carbon' Initiative in response to the Chinese population growth and its contribution to the increase of greenhouse gases in the following years. Some estimates on this behalf show that, in 15 years, 250 million Chinese will leave rural China and move to the city, which means doubling power consumption. Finally, another point to be emphasised is the promotion of environmentally sustainable products in both countries.

China's greater involvement in the reduction of greenhouse gases' emissions and therefore in showing an active position in the fight against climate change is due to its necessity of reaching a sustainable development —in other words, this means supply of energy resources, food security and social welfare minimising harm to the environment. All these areas are related to climate change and they are all important. Both the problems with pollution experienced by some Chinese cities and the environmental degradation can lead to social revolts and they could challenge the government as well as cause social destabilisation.



[http://www.iaea.org/inis/collection/NCLCollectionStore/\\_Public/39/036/39036330.pdf](http://www.iaea.org/inis/collection/NCLCollectionStore/_Public/39/036/39036330.pdf)

Another positive aspect to mention is that China and the US have encouraged other countries to establish their objectives in the first quarter of 2015, so more commitments of other greenhouse gases' emitters are likely to take place.

The agreement gives China and the US a new condition of 'climate allies'. However, an in-depth analysis of the agreement shows that geopolitical interests underlay on the responsibility assumed by both parties. China needs to reduce its level of pollution and reach a sustainable development, and that is only possible through technological innovation and clean energies such as renewable or nuclear. On the other side, the support of the US would promote its presence in the Asian region, counteracting Russia's interest on exporting Chinese gas.

## Conclusions

The complexity of reaching a new agreement is evident. No one dares to establish the legislative form of the agreed text. Few argue that it will consist on a binding agreement of the same nature as the Kyoto Protocol, but rather of a legal agreement. There are many options on the table and it is impossible to satisfy all of them.

In parallel with such negotiating process, other agreements and commitments at an international scale are coming into life, adding a more realistic view to the effective fight against climate change relating economy and energy, as it is the case for the Chinese-US agreement or the 2030 Framework for climate and energy in the European Union.

Nevertheless, even if the fight against climate change could be developed nationally, bilaterally or regionally without a world legal framework similar to the Kyoto Protocol, reaching a commitment to build confidence in order to invest in new technologies would be necessary and advisable. According to the IEA, “delaying a more determined climate action until 2020 would mean paralysing the \$ 1.5 billion investment in low CO<sub>2</sub> emission technologies<sup>16</sup>”.

*M<sup>a</sup> del Mar Hidalgo García*  
*Analyst at the Spanish Institute for Strategic Studies (IEEE)*

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<sup>16</sup> World Energy Outlook 2013. IEA