QUANTIFIED PROPOSAL – BASED ON CRITERIA OF CLIMATE JUSTICE PER CAPITA - OF THE DISTRIBUTION AMONG THE UNFCCC STATE PARTIES OF THE EMISSIONS MITIGATION GLOBAL OBJECTIVE DEFINED BY SCENARIO RCP2.6 OF THE IPCC’S AR5

“THE CARBON BUDGETS THAT WILL PREVENT THE AVERAGE TEMPERATURE OF THE EARTH’S SURFACE FROM INCREASING BY MORE THAN 2°C WHEN COMPARED WITH THE TEMPERATURE OF THE PRE-INDUSTRIAL ERA”

FACT SHEET CMA 1: MEDITERRANEAN 2°C REFERENCE SCENARIOS

MARRAKESH 2016 – CMA 1
THE GLOBAL CARBON BUDGET FRAME

The name GLOBAL CARBON BUDGET refers to the total amount of CO2 emissions that can still be released into the atmosphere in accordance with the criterion of not exceeding an increase of 2°C of the Earth’s surface temperature, as estimated by the Intergovernmental Panel on Climate Change, IPCC, in its Fifth Assessment Report, AR5.

From all the Representative Concentration Pathways (RCP’s) future scenarios considered, only one of them has a “likely” probability to achieve this objective: the RCP2.6 scenario.

The most important element of the CO2 - RCP2.6 scenario is not so much its trajectory over time, but rather the surface that it defines, and which quantifies the GLOBAL CARBON BUDGET: approximately 1000 GtCO2 – the Cumulative CO2 emissions consistent with the goal of keeping the global average temperature rise below 2°C with > 66% probability (AR5 IPCC).

DISTRIBUTING THE GLOBAL CARBON BUDGET WITH EQUITY OR CLIMATE JUSTICE

There are several manners to introduce ethical concepts like EQUITY or CLIMATE JUSTICE in a computer with the aim to calculate a “fair” distribution of the “Global Carbon Budget” among the UNFCCC state parties. The results presented here have been obtained applying our Model of Climate Justice per capita, MCJ. See also our Fact Sheet II.
TO TRANSLATE THE WORLD 2°C REFERENCES TO REGIONAL/COUNTRY LEVELS

- The RCP2.6 scenario and the Global Carbon Budget are the World references that we have to follow in order to achieve the 2°C goal.
- It's necessary to translate these two references to different regions and/or countries:
  - These “country specific 2°C reference scenarios” have to be available before countries produce their second NDCs (2020) because they could be used as a common reference for everyone.
- The Paris agreement “will be implemented to reflect equity”. And in its preamble the importance for some of the concept of “climate justice” is noted.
  - In any case, from an equity perspective, “the specific 2°C reference scenarios for regions or countries” must lead to the same final quantity of emissions per capita.

THE MEDITERRANEAN 2°C REFERENCE SCENARIO

The World 2°C emissions scenario for all GHG

The Mediterranean 2°C emissions scenario for all GHG

The Global Carbon Budget

The Mediterranean Carbon Budget

from 2011 to 2100 → **1000GtCO2** → **68 GtCO2**
THE PARADIGM SHIFT THAT OUR EQUITY OR CLIMATE JUSTICE METHODOLOGY ENTAILS

Historical distribution of accumulated emissions (1971-2010) 67 GtCO2

Carbon Budget distribution according to our Equity Model of Climate Justice (2011-2050) 65 GtCO2

Historical distribution of accumulated emissions (1971-2010) 67 GtCO2

Carbon Budget distribution according to our Equity Model of Climate Justice (2011-2050) 65 GtCO2
UNFCCC INDCs EVALUATION in the context of the Global Carbon Budget framework

The major\textsuperscript{1} official report on the INDCs have finally analyzed the aggregate effect of the INDCs under the focus of the RCPs pathways (IPCC AR5) and, mainly, the Global Carbon Budget paradigm!

– In the last update (02-05-16) of the UNFCCC Synthesis report, we can see the following figure and we can conclude that the current INDCs pathways until 2030 will consume 75% of the available Global Carbon Budget 2011-2100 for staying below 2°C

![Graph showing the Global Carbon Budget and INDCs pathways]

– And we can also conclude according other figure of this update that there is a big gap between the current INDCs and the level of compromises required to achieve the objectives set out in Paris!

\textsuperscript{1} UNFCCC Synthesis report on the aggregate effect of INDCs. [http://unfccc.int/focus/indc_portal/items/9240.php](http://unfccc.int/focus/indc_portal/items/9240.php)
Results of the GGCC evaluation of the INDCs:

1. Aggregate of Mediterranean countries, which submitted INDC with Quantifiable Compromises, AM-wQC

<table>
<thead>
<tr>
<th>AM-wQC</th>
<th>Albania</th>
<th>Greece (EU28)</th>
<th>Morocco</th>
</tr>
</thead>
<tbody>
<tr>
<td>Algeria</td>
<td></td>
<td>Israel</td>
<td>Slovenia (EU28)</td>
</tr>
<tr>
<td>Bosnia and Herzegovina</td>
<td></td>
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<tr>
<td>France (EU28)</td>
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<td>Montenegro</td>
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</tbody>
</table>

Staying below 2°C with >66% probability
2. The OECD- Mediterranean countries

Staying below 2°C with >66% probability

3. The non OECD- Mediterranean countries

Staying below 2°C with >66% probability
Generally speaking, the contributions of the Mediterranean countries (AM-wQC) are far away from the 2°C goal:
- In 2030, there will be a gap of 1GtCO2eq = 1000 MtCO2eq between the 2°C reference scenario and the aggregate contributions of the INDCs.
- 76% of their carbon budget (2011-2100) will be spent from now to 2030.

There is a substantial difference when we look at the differences between developed and developing countries:
- The OECD-members are mainly responsible for the 1GtCO2eq = 1000 MtCO2eq gap. 88% of their carbon budget (2011-2100) will be spent from now to 2030.
- The Non OECD members are quite close to the 2°C track. 47% of their carbon budget (2011-2100) will be spent from now to 2030.

CONCLUSIONS AND PROPOSALS RELATED WITH THE FUTURE 2n NDCs OF THE MEDITERRANEAN REGION

It’s extremely important to have references in order to assess if a country (or a region) is on track for the 2°C goal.

Good 2°C references at a global level are the RCP2.6 future emission scenario and their associated Global Carbon Budget.

Based on Equity and Climate Justice criteria it’s fully possible to translate these two global references to the Mediterranean region and countries.

The Carbon Budget for the Mediterranean Region (M-CB) amounts to 68GtCO2, which has historically been and still is unequally emitted by the OECD and non-OECD Mediterranean countries.

Using these approaches and methodologies it is possible and necessary to quantitatively formulate a specific Mediterranean Policy of cooperation in the fight against Climate Change!