



# World Wide Views on Global Warming

FROM THE WORLD'S CITIZENS TO THE CLIMATE POLICY-MAKERS



**TEKNOLOGI-RÅDET**  
THE DANISH BOARD OF TECHNOLOGY

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## **World Wide Views on Global Warming**

### **From the world's citizens to the climate policy-makers**

#### **Policy Report**

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This Policy Report is available for download at  
[www.wwviews.org](http://www.wwviews.org)

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*World Wide Views on Global Warming (WWViews) is the first-ever, globe-encompassing democratic deliberation. It focuses on what has been called the biggest common challenge for mankind: global warming.*

As markets, technologies and environmental issues become increasingly global in scale, so does policymaking. In this new reality, the distance between citizens and policymakers increases, thereby diminishing the citizens' sense of ownership in decision-making. This creates a need for new initiatives to bridge the widening democratic gap.

Global warming requires global policymaking. Despite this, climate policy debates have to a large extent been limited to scientists, politicians and powerful interest groups, further widening the gap between citizens and policymakers.

Citizens have to live with the consequences of climate policies. Their views should therefore be taken into consideration. Policies determined at COP15 will mean that citizens will have to invest in new technology, develop new consumer patterns, modify their houses and even their livelihoods. They are more likely to accept and implement such policies if they have been consulted and listened to first.

Until now, no systematic and in-depth global citizen consultancy on climate change has been organized. WWViews fills this void and establishes a model for the future inclusion of the world's citizens in global policy making. The novel and practical project design makes it potentially possible for all nations on Earth to take part and to produce comparable results that can be clearly communicated to policy-makers.

World Wide Views on Global Warming involved roughly 4,000 citizens in 38 countries spanning six continents. The citizens gathered in their respective nations to deliberate about the core issues at stake in the December 2009 UN negotiations on climate change. They received balanced information about climate change, discussed with fellow citizens and expressed their own views. They did so in daylong meetings on September 26, 2009.

This report summarises their answers and presents some of the most significant results, which can be studied in greater detail at [www.wwviews.org](http://www.wwviews.org). It is aimed at policy-makers with previous knowledge about climate issues, and written by the WWViews coordinators in cooperation with the 44 national partners and the assistance of an expert workshop.

We expect political decision-makers to carefully consider the views of the citizens when formulating the climate policy for the future, in Copenhagen and beyond.

November 2009  
Bjørn BEDSTED, WWViews Coordinator  
Lars KLÜVER, WWViews President





**R**esults from the first-ever global citizens' consultation on climate change are clear: Citizens from all parts of the world mandate their politicians to take fast and strong action at COP15.

The WWViews results are based on well-established principles for citizen participation, and offer a unique and detailed insight into ordinary people's views on climate change and how to make global policies to deal with it. The 4,000 participating citizens from 38 countries were chosen to reflect the demographic diversity in their respective countries and regions. They were provided with unbiased information about climate change and the COP15 negotiations, and they were given time to deliberate with fellow citizens.

The results are remarkably consistent across national income groups and geographical regions. The participating citizens voted on alternative answers to 12 predefined questions and produced a large number of recommendations phrased in their own wordings. Synthesizing these results, we can deduce nine clear Policy Recommendations from the citizens. The recommendations are:

- Make a deal at COP15
- Keep the temperature increase below 2 degrees
- Annex 1 countries should reduce emissions with 25-40 % or more by 2020
- Fast-growing economies should also reduce emissions by 2020
- Low-income developing countries should limit emissions
- Give high priority to an international financial mechanism
- Punish non-complying countries
- Make technology available to everyone
- Strengthen or supplement international institutions

WWViews results can be studied in detail at [www.wwviews.org](http://www.wwviews.org)



On September 26, 2009 the first WWViews meeting started at 9 am in Australia. The last one finished 36 hours later in USA, California. 38 countries participated.



## ABOUT WORLD WIDE VIEWS ON GLOBAL WARMING



EGYPT



MOZAMBIQUE

Inasmuch as citizens will have to live with the decisions made at COP15, it would only be fair to consult them during the preparations.

### The timeline



### Late 2007

## The idea

The Danish Board of Technology developed the idea for WWViews as a response to the emerging democratic gap between global policy makers and citizens, as more decisions become global in scale. The Danish Board of Technology has a long tradition of involving ordinary citizens in political decision-making processes nationally and on a European scale. No one has done so before on a global scale and COP15 seemed to be a good opportunity, since expectations were building up to sealing a new climate deal in Copenhagen. Also, there was a clear need to involve ordinary people in a debate otherwise heavily dominated by scientists, politicians and powerful interest groups.

Inasmuch as citizens will have to live with the decisions made at COP15, it would only be fair to consult them during the preparations. Furthermore, if a new climate deal is going to be implemented successfully, it requires the acceptance and cooperation of citizens worldwide. In democratic and functional terms, a new deal will not work effectively if it does not enjoy support from a large majority of the world's population.



## Early 2008 and onwards

### The WWViews design

The cornerstones of the WWViews method were laid down at an early stage in a workshop with the first WWViews partners. The design of WWViews was developed in response to the practical challenges the partners faced:

- Cheap and easy: The method had to be feasible for potentially all countries in the world to participate, regardless of financial income and general education level.
- Clear link to policy-making: It had to address issues of immediate relevance to policy-makers.
- Both global and national: It had to be salient to both national and global decision-making.
- Clear and comparable results: Results had to be comparable across countries and regions and they had to be easy to communicate to policy-makers.
- Informed citizens: Citizens had to be provided with the balanced information necessary in order to understand the issues debated.
- Deliberation: Citizens should be given the opportunity to discuss their views with each other before defining their own standpoints.
- Qualitative and quantitative: The citizens should have opportunity to phrase their own recommendations as well as voting on alternative answers to predefined questions.

On this basis, it was decided to have large groups of citizens (roughly 100) meet in each of their respective countries or regions to deliberate on an identical set of questions, using identical meeting designs, and then connect these meetings and their results through web technology.

The WWViews method differs in important ways from conventional opinion polls. Although the sample size of 100 per country or region somewhat limits the national statistical validity of the results, it is nonetheless large and diverse enough to give a sense of general trends in national and international opinions. Unlike

opinion polls, the WWViews method provides respondents with balanced and scientifically based information, as well as an opportunity to deliberate for a full day with other citizens prior to rendering their judgements. It thus allows for more detailed questions and well-considered responses, and the WWViews results can be interpreted as a leading indicator for what conventional opinion polls will likely find in the future, as populations gradually learn more about climate change.

## 2008 – May 2009

### Selecting the partners

The WWViews national partners have been responsible for organizing WWViews meetings in their respective countries or regions. To become partners they should preferably

- have some experience with citizen participation methods
- be unbiased with regards to climate change
- be able to follow the common guidelines
- self-finance their participation in WWViews

Contacts were made to established networks that helped distribute the call and to identify potential partners. In the end, over 50 partners joined forces to arrange 44 deliberations in 38 countries spanning six continents. The partners typically include public councils, parliamentary technology assessment institutions, non-governmental civil society organizations and universities. Most partners were self-financed but several partners, especially from developing countries, received support from sponsors. Despite high motivation, several potential partners were not able to join, due to lack of financing. Had additional funding been available, the global coverage of WWViews thus could have been significantly expanded.

The WWViews partners include a dozen countries, most of them in the developing world, where there is practically no previous information on citizen views on climate change and climate policy.





Project managers from around the world in front of the Danish Parliament in March 2009, where WWViews was officially launched.

### Mid 2008 and onwards

## Questions and information material for the citizens

The questions put to the citizens worldwide were chosen to be of direct relevance to the COP15 negotiations. They had to be identical in all countries in order to allow for cross-national comparisons. To ensure clear communication to policy-makers, the questions were predefined with alternative answer options. The 12 questions chosen were clustered in 4 themes:

- Climate change and its consequences
- Long-term climate goal and urgency
- Dealing with greenhouse gas emissions
- The economy of technology and adaptation

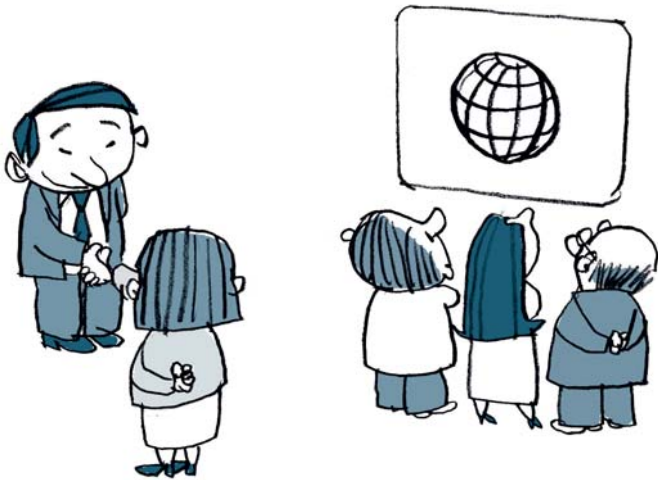
To compensate for the restricted format of predefined questions, it was decided to also allow time for the citizens to formulate and vote on their own recommendations.

An information booklet of 40 pages was produced with background information about climate change (drawing on IPCC's fourth assessment report) and the COP15 negotiation issues.

Information videos (each 5-12 minutes long) were made for each of the four themes, repeating the most essential information available in the booklet and ensuring that all citizens would participate in the meetings with the necessary information. All WWViews information material was translated into local languages.

In some countries, WWViews partners decided to gather the citizens the day before the meeting in order to allow time to familiarize themselves with the information material.

The questions and information material were developed in close cooperation between the WWViews partners. An international scientific advisory board was responsible for assuring the quality of the material, and it was also tested by focus groups in different parts of the world before completion.

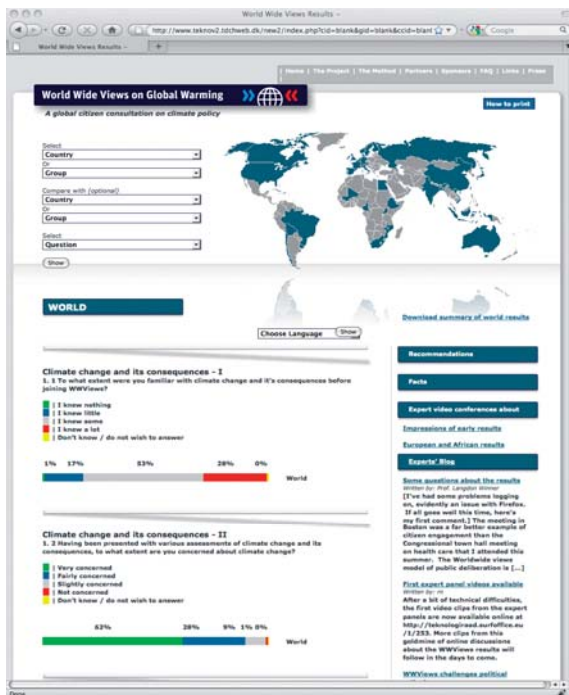


Welcome to WWViews Day



Deliberation in groups

Voting after each thematic session



### Late 2008 and onwards

## The web tool

A special web tool was designed for the purpose of near-instant collection and presentation of the results from the WWViews meetings. The tool allows for statistical presentation and comparison of results between countries/regions and various international groupings (i.e. continents, Annex 1 countries, non-Annex 1 countries, low income countries, high income countries). It can be found at [wwviews.org](http://wwviews.org).

### March 23-25, 2009

## Training seminar

Most of the project managers from the WWViews national partner institutions met in Copenhagen half a year prior to WWViews Day for a training seminar. The purpose of the seminar was to ensure a common understanding of the project, uniformity of method implementation and procedural solutions for culturally specific challenges. Partners joining WWViews later than this date came to Copenhagen for individual training sessions.

### May – August 2009

## Selecting the participating citizens

Guidelines for selecting the participating citizens were made in order to ensure the reliability of the results: The citizens at each meeting should reflect the demographic distribution in their country or region with regards to age, gender, occupation, education, and geographical zone of residency (i.e. city and countryside). A further criterion was that they should not be experts on climate change, neither as scientists nor stakeholders. Where appropriate, national partners added additional demographic criteria, which were relevant to their national context; for example race or ethnic groups.

Based on reports from the partners, the guidelines have been followed, albeit with some local variation due to economic or practical limitations.





New deliberations



Writing recommendations to COP15



Goodbye and thank you for participating

A tendency towards under-representation of the lowest educated can be seen in many countries. Some countries ended up with fewer than 100 citizens (a few considerably lower). Some countries or regions recruited citizens from their entire geographical area, whereas others recruited from a smaller area in order to cut expenses.

The sample of citizens consulted in WWViews is, however, large and diverse enough to give a sense of general trends in national and international public opinion.

**September 26, 2009**

## WWViews Day

### The world

On September 26, 2009 the first WWViews meeting started at 9 am in Australia. The last one finished 36 hours later in California, USA. As the day progressed, citizens voted on alternative answers to the predefined questions and developed their own recommendations. These results were instantly reported on [wwviews.org](http://wwviews.org), so that anyone with Internet access could – and they still can – compare answers to the various questions across countries, regions, political and economic groupings, etc.

An auto-generated summary of all the latest results was also instantly available.

Photos and videos from the various meetings were continuously uploaded to a media share server. Video interviews with citizens were made available as well.

Some countries arranged to link up via Internet videoconferences. Others presented pictures and results from other countries to their participants.

### The meeting

All meetings followed the same schedule: The 100 citizens, divided into tables of 5-8 people, were led by a head facilitator and group moderators through a programme divided into four thematic sessions and a recommendation session.

During the thematic sessions, citizens voted on alternative answers to a total of 12 questions, thus making international, quantitative comparisons possible. Each thematic session was introduced by the facilitator and an information video.



Connie Hedegaard, COP15 host and WWViews ambassador, at the Danish meeting.



The participants then engaged in moderated discussions at their tables, the purpose of which was to give all participants time to listen to other opinions and reflect prior to voting. Moderators were trained in advance to provide un-biased facilitation at the tables. Each thematic session concluded with citizens casting their votes anonymously on two to four questions. Votes were counted first at the tables, then by the staff and immediately reported to [wwviews.org](http://wwviews.org).

During the recommendation session, citizens wrote in their own words what they believed to be the most important recommendation to pass on to COP15 negotiators. Each table produced one recommendation and all citizens then voted for the ones from all the tables that they found most important, resulting in a prioritised list of recommendations, also reported to [wwviews.org](http://wwviews.org).

Most meetings were either opened or closed by ministers, COP15 negotiators or other government officials.

#### September 26 and onwards

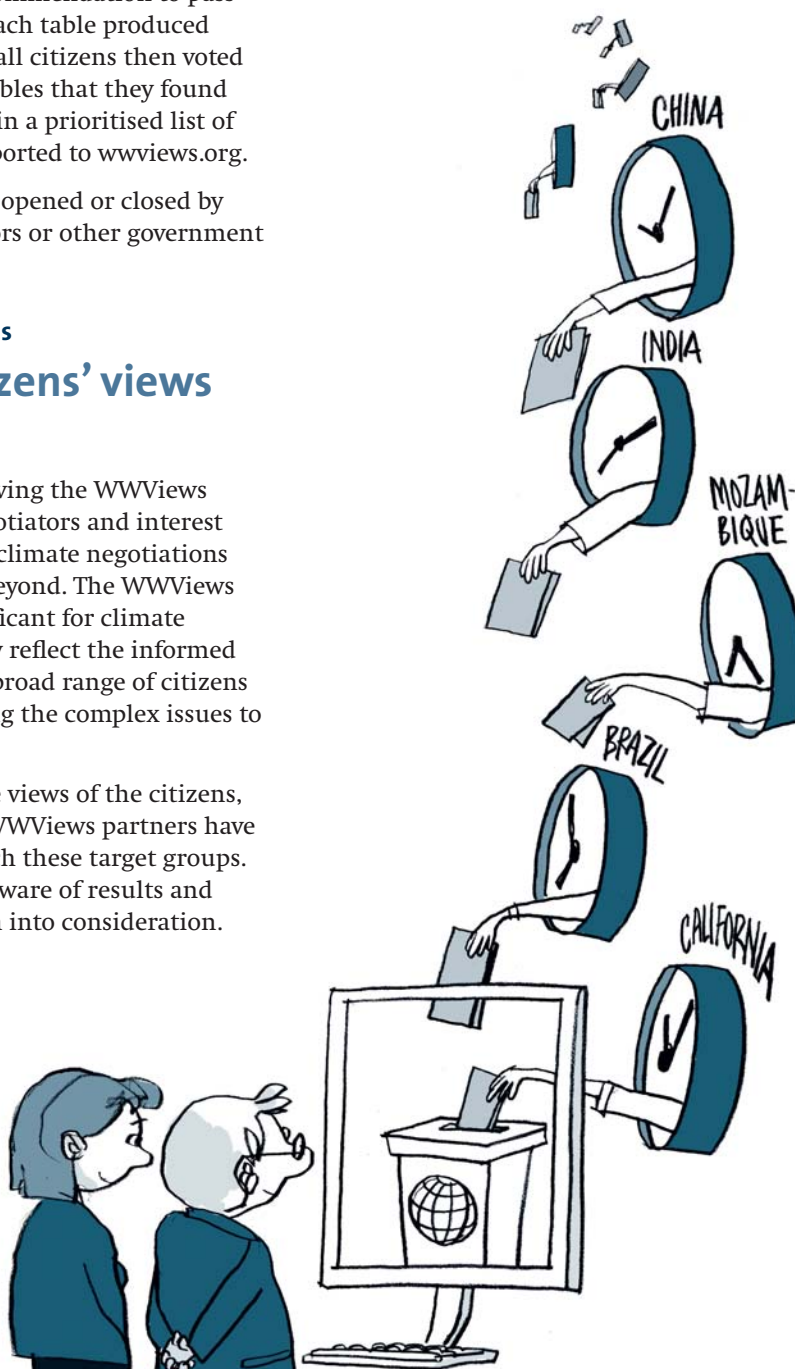
### Making the citizens' views heard

The target groups for receiving the WWViews results are politicians, negotiators and interest groups engaged in the UN climate negotiations leading up to COP15 and beyond. The WWViews results are especially significant for climate policy-makers because they reflect the informed and considered views of a broad range of citizens across the world concerning the complex issues to be addressed at COP15.

In order to disseminate the views of the citizens, all national and regional WWViews partners have made plans for how to reach these target groups. The goal is to make them aware of results and ensure that they take them into consideration.

*»World Wide Views creates a unique possibility to engage citizens from all corners of the world in the process towards the UN Climate Conference in Copenhagen this December. It ensures that we politicians get a reality check on how citizens of the world think the agreement should be put together.«*

Connie Hedegaard, COP15 host and WWViews ambassador



From the early start in Australia to the late finish in California the many votes and recommendations were instantly reported on [wwviews.org](http://wwviews.org) and available for comparisons. They still are.



## The general answer: Fast and strong global policy

Reading across the votes and recommendations from all participating countries, one impression stands clear: The participating citizens mandate their politicians to take fast and strong action at COP15.

The atmosphere at the meetings reflected dedication and seriousness of purpose. A multitude of ideas and viewpoints, including climate scepticism, green opinions, and much doubt was aired and confronted at the tables. When it came to taking a decision and vote, the diversity and differences in opinions were less dominant: There is a very high degree of consensus among the citizens that climate change should be dealt with promptly and with ambitious targets.

The citizens want a deal to be made at COP15, and not later. They call for long-term global average temperature targets of less than 2 degrees Celsius above pre-industrial levels. They follow that up with a wish for higher reduction targets than their politicians are stating in the lead-up to COP15. They call for fair and proportionate burden sharing – in national terms the broadest shoulders should carry the heaviest load – but participants

from all countries are willing to contribute. Those countries that do not live up to their commitment should be met with punishments. The citizens see technology development and distribution as a prerequisite for effective global policies and they want an international financial system to pay for technology transfer and adaptation. And they support strong international institutions to advance the objectives of a new climate deal.

The citizens urge their governments to take strong and fast action, but they also point to the necessity for mobilising their own efforts as citizens and consumers. They recommend awareness-building, education and positive market incentives as instruments to help populations act in support of climate policies. A majority of the global participants wants the price of fossil fuels to be increased, which shows a willingness of individual citizens to contribute.

The following policy recommendations are the results of thorough analysis of the WWViews results by the project coordinators assisted by a group of national partners from across the world.



BELGIUM

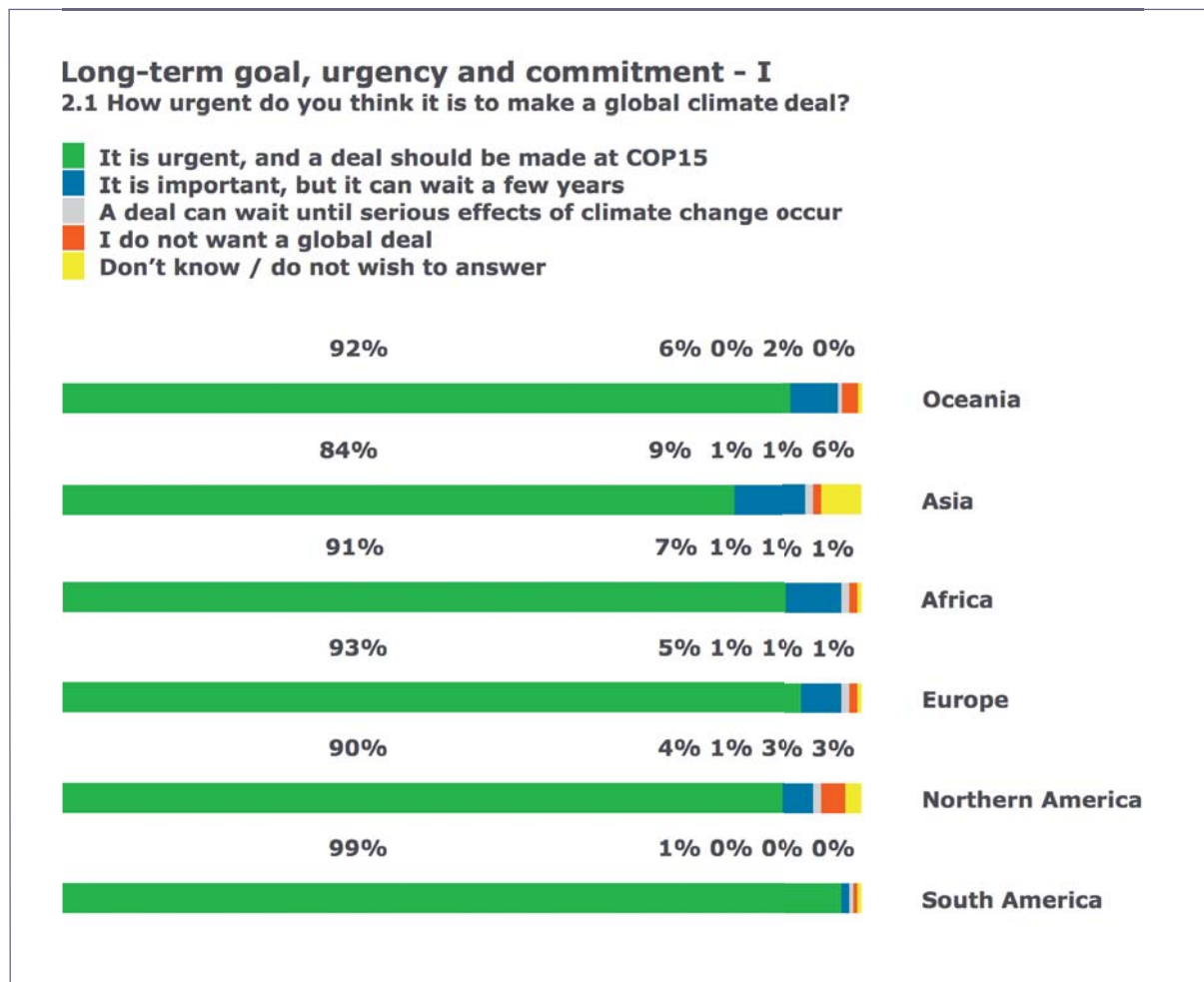
The citizens participating in WWViews became much more informed than the average citizen and they were given time and facilitation for deliberation with other citizens. It is up to each reader of the policy recommendations on the following pages to determine how to value the citizens' answers. They do, however, indicate that the more people learn about and consider climate change issues, the tougher they want climate change policies to be.

**From South Africa:**

»Act now against global warming for our children of tomorrow. Global warming must be given urgent priority«.

**From Denmark:**

»Reduce greenhouse gasses NOW! Make all countries accede to an agreement on greenhouse gas reductions«.





#### From Canada:

»We recommend global consensus on action for proactive environmental change with specific measurable, achievable, realistic, time-specific goals and the equitable utilization of technological and economic resources, reinforced with systems of accountability«.

#### From Indonesia, Jakarta:

»A firm, fair and transparent system needs to be developed for the world's citizens in tackling the climate change problems«.



### POLICY RECOMMENDATION

## Make a deal at COP15

Reflecting a remarkable consensus, fully nine out of ten WWViews participants from around the world urge their COP15 delegations to reach a new, binding climate change deal at COP15, rather than waiting until later.

#### OBSERVATIONS

- Worldwide 91% of the participants answer that it is urgent to make a deal at COP15.
- Conversely, only 7% say that it is acceptable to wait until after COP15 to reach a new international climate deal. Only 1% “do not want a global deal”.
- Around the world this result is quite consistent across all national income levels: in 36 out of 38 countries, 80% or more of the participants agreed that it is urgent to make a deal at COP15. There are only two exceptions. One is Russia, in which nonetheless two-thirds (67%) communicate urgency, while 28 percent answer that it is important to reach a deal, but it can wait a few years. The other is China, in which 51% find it urgent to reach a deal at COP15, 11% vote that a deal could wait a few years, and 29% have no opinion or do not wish to answer.

#### ASSESSMENTS

The WWViews participants' strong and trans-nationally consistent expressions of urgency for reaching an agreement at COP15 send a strong message to their negotiators. This message contrasts with the equivocation that some leaders of key nations have expressed on this score in the months immediately preceding COP15.

The overwhelming worldwide support among participants for reaching a deal at COP15 is reinforced by the 90% support worldwide for having one's own politicians actually sign such an agreement. Here too, there is appreciable consistency among national responses. In almost all nations, support for having one's own nation sign on to a new global climate deal stands at two-thirds (67%) or higher.

It is also noteworthy that despite considerable national variation in levels of personal concern with the repercussions of global warming, there is strong international consistency when it comes to the urgency of sealing a deal at COP15.



JAPAN



USA, MASSACHUSETTS



AUSTRALIA

**From Australia:**

*»Act now to limit warming below 2°C through a legally binding global agreement. The need for leadership, education and technical advances is paramount«.*

**From Japan:**

*»Our Earth is like a patient with a fever. We must collaborate to save her by sharing our wisdom so as to provide economical and technological remedies to avoid +2 degrees damage«.*

**From Sweden:**

*»Be brave! Take far-reaching and binding decisions regarding large emission reductions now!«*

From USA, Massachusetts:

»1.5 degrees Celsius or bust!«

From Chinese Taipei:

»2 degrees Celsius is crucial«.



## POLICY RECOMMENDATION

# Keep the temperature increase below 2 degrees

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Almost nine out of ten WWViews participants view 2 degrees Celsius as a maximum acceptable goal for temperature increase. Half of the participants even want to limit the increase to the current level or return to the pre-industrial level

### OBSERVATIONS

- 88% of WWViews participants want to limit the increase in world temperatures to 2 degrees Celsius or less above pre-industrial levels.
- Only 4% are willing to accept an increase of above 2 degrees, even fewer feel that a target is unnecessary.
- Half of the participants want to keep temperature increase to the current level or even bring temperatures down to the pre-industrial level

### ASSESSMENTS

The majority of participants appear to have a lower tolerance for temperature increases than most policy makers.

The overwhelming worldwide support among participants for limiting, stopping and even reversing temperature increase is reinforced by their support for high greenhouse gas reduction targets. Hence, the WWViews participants give their COP15 negotiators a strong mandate for seeking to limit the increase in global temperatures.

It is noteworthy that some of the countries with the highest level of support for a return to a pre-industrial temperature level are Malawi (48 %), Egypt (39 %), Mali (33 %) and the Maldives (32%). These are countries projected to be hard hit by the consequences of climate change.

**From the Maldives:**

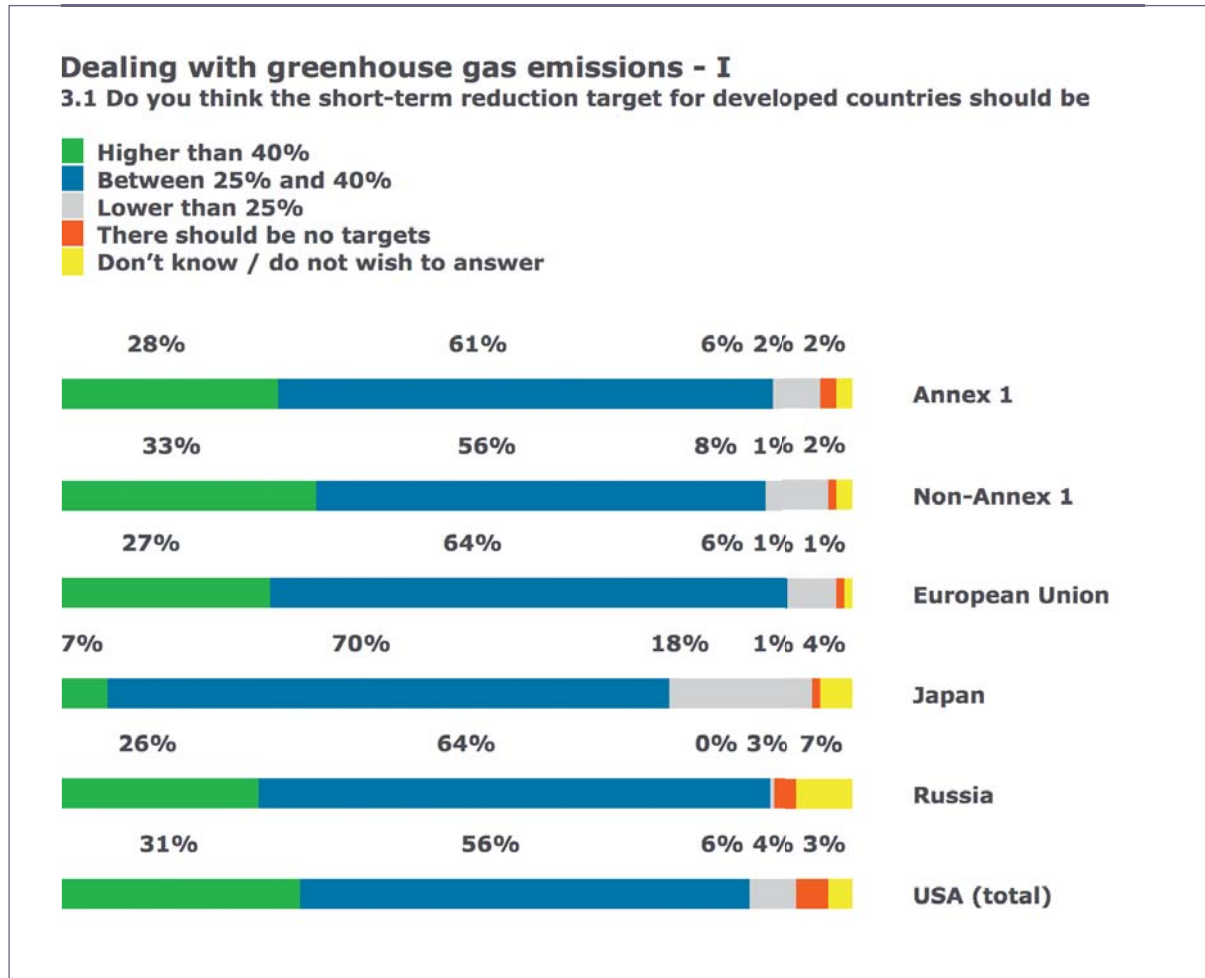
»Link mitigation and adaptation and mandatory corporate social responsibility to ensure CO<sub>2</sub> levels in the atmosphere are lower than 350PPM«.

**From USA, Colorado:**

»Implement binding, equitable commitments to 25-45% CO<sub>2</sub> emissions reductions by 2020«.

**From USA, California:**

»As a major polluter, we believe greenhouse gas emissions need to be lowered by 30% globally by 2020, with periodic checks on progress«.





#### From Norway:

»Norway has to take a leading role. Norway should reduce its GHG emissions with 40 % within 2020«.

#### From Mali:

»Industrialized countries must honour their commitments«.

#### From Belgium:

»[We recommend] actual reduction of the emissions instead of emission rights for all countries«.



## POLICY RECOMMENDATION

# Annex 1-countries should reduce emissions with 25-40% or more by 2020

The WWViews participants want COP15 negotiators to agree on year 2020 emissions reductions of 25-40 % or more beneath 1990 levels for Annex 1 countries.

### OBSERVATIONS

- 89% of the participants want emission reductions of 25-40% or more by 2020.
- One-third of participants want more than 40% reductions.
- Less than 10% want less than 25% reduction.
- Emission reductions for Annex 1 countries of 25-40 % or more is equally supported by participants from both Annex 1 countries and non-Annex 1 countries.

### ASSESSMENTS

The reduction targets promoted by the citizens are more ambitious than the proposals that are on the table for the COP15 meeting in Copenhagen. Hence, the WWViews participants give their COP15 negotiators a strong mandate for agreeing on higher emission reduction targets for Annex 1 countries.

The reduction targets supported by participating citizens are in line with the present IPCC assessment of what is needed if the global temperature increase is to be kept below 2 degrees Celsius.

It is interesting to note that also US participants, coming from the only country that has not ratified the Kyoto protocol, want high emission reduction targets for Annex 1 countries. 56% of the US participants want 25-40% reductions, and 31% want reductions by 40% or more, meaning that 87% want reductions from 25% and up. These ambitions by far exceed the ambitions of the US-administration.

**From Germany:**

»We demand binding reduction targets which are in accordance with both the capabilities and the responsibility of all countries«.

**From Egypt:**

»The environmental factor should take priority in any political decision of countries participating in the conference«.

**From Cameroon:**

»Every country should engage in a proportionate reduction of greenhouse gases according to the damages they have caused to the environment with clear indicators and visible results«.

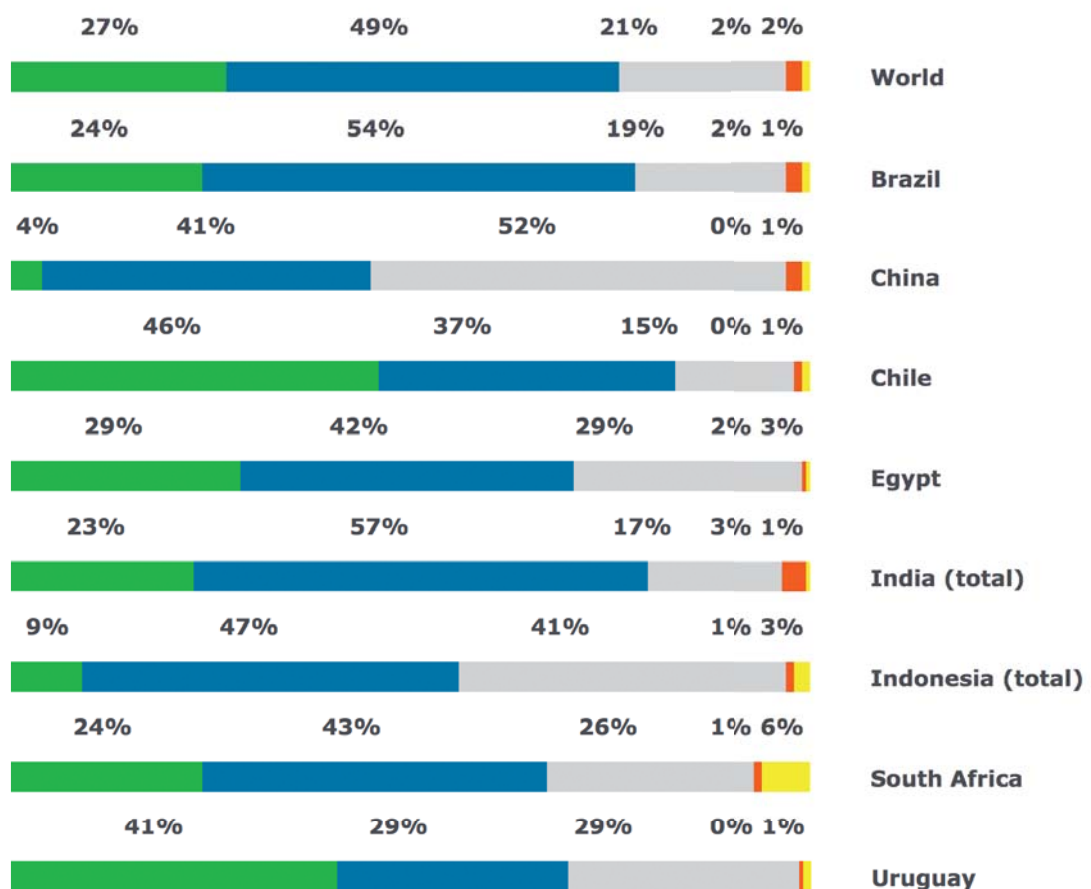
**From Uruguay:**

»Solidarity between countries with different economies«.

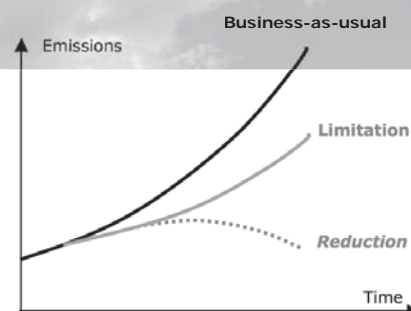
**Dealing with greenhouse gas emissions - II**

**3.2 What do you think the short-term target should be for Non-Annex 1 countries with substantial economic income and/or high emissions?**

- The same targets as for Annex 1 countries
- Their emissions should be somewhat reduced and increasingly so the richer they are and the more they emit
- Their growth in emissions should be somewhat limited and increasingly so the richer they are and the more they emit
- They should not be committed to control their emissions in any way
- Don't know / do not wish to answer



To limit the growth in emissions compared to business-as-usual means that emissions can still grow for a while, though not as fast as they would if no additional measures were taken.



## POLICY RECOMMENDATION

# Fast-growing economies should reduce emissions by 2020

WWViews participants support the introduction of 2020 reduction targets for fast-growing economies such as Brazil, China, Chile, Egypt, India, Indonesia, South Africa and Uruguay that have substantial economic income and/or high emissions. This support is equally strong (with one exception) among citizens from these countries themselves.

### OBSERVATIONS

- 76% of the WWViews participants support year 2020 emission reductions of greenhouse gases beneath 1990 levels as a target for the fast-growing economies (i.e. actual reductions). Another 21% support only the limitation of the growth in emissions compared to business-as-usual (i.e. limiting growth). See the explanatory graph.
- Half of all participants support the target of reducing emissions of fast-growing economies in proportion to their economic situation and level of emissions, whereas 27% feel that the targets for fast-growing economies should be the same as for Annex 1 countries.
- Two-thirds of participants from the growth economies themselves support actual emission reductions by 2020.
- As the world's largest emitter of greenhouse gases and the largest fast-growing economy, China is of particular interest. 45% of the Chinese participants support actual emission reductions in their own country, whereas a small majority (another 52%) support limitation of the growth of emissions as the target for growth economies. In contrast, the majority (72%) of participants from other fast-growing economies support actual emission reductions.

### ASSESSMENTS

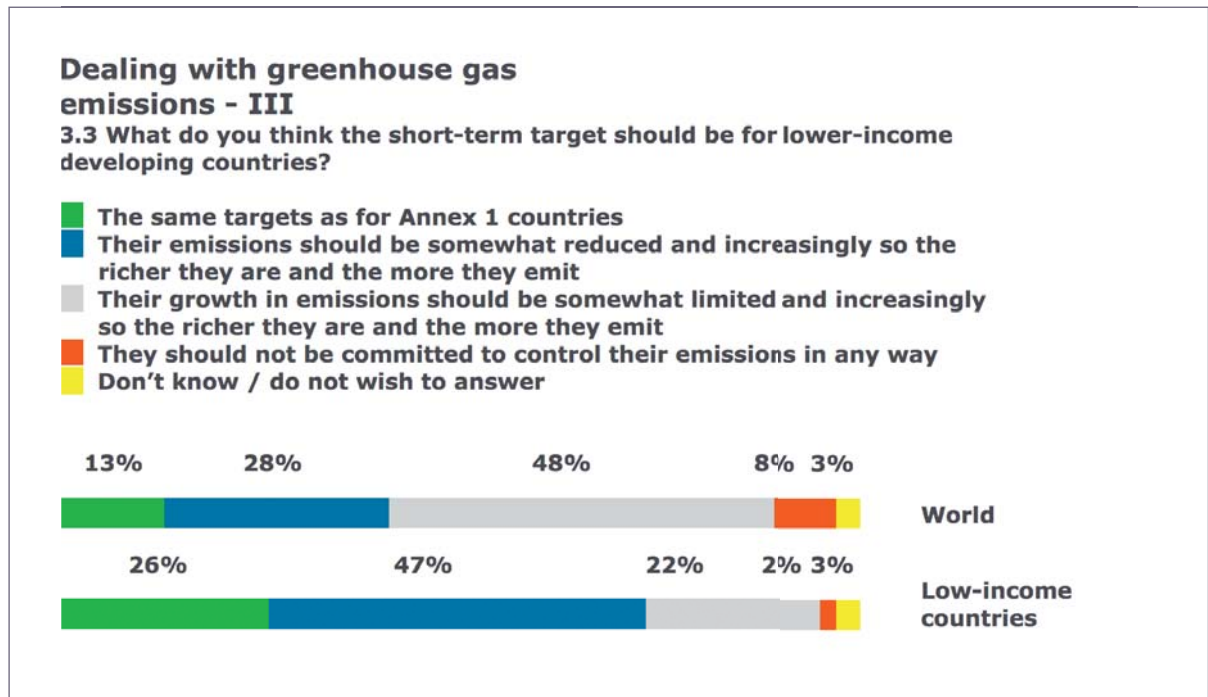
The strong support from WWViews participants for 2020 reduction targets for fast-growing economies is dramatically at odds with the ongoing negotiations, in which no demands are made for such commitments. The participating citizens wish for actual reductions, whereas political negotiations revolve around limiting the growth in emissions only, compared to business-as-usual. The WWViews participants thus give their COP15 negotiators a strong mandate for introducing tougher emission targets for fast-growing economies than are currently on the table.

The high level of willingness to take actions toward emission reduction by the citizens in fast-growing economies demonstrates a high level of self-responsibility. Although participants in China are the least inclined to introduce 2020 targets for fast-growing economies, nonetheless 45% wish to do so while another 52% are in favour of limiting the growth in emissions.

By acknowledging national variations in capacity to meet 2020 target, the WWViews results indicate clear support among the participating citizens for the principle of proportional responsibility.

**From India, Delhi:**

»As developed countries have reached higher standard in the process thus strict regulation must be enforced on them as soon as possible to cut down their emissions. Also developing countries must be provided with aids to search for new ways of energy usage in place of fossil fuels to cut down the emissions without barring their progress«.



VIETNAM



INDIA



#### From Malawi:

»Strong policies should be implemented for those countries with high emissions of greenhouse gases. Developed countries must adopt new and clean technologies to reduce emissions«.

#### From Vietnam:

»Use a CO<sub>2</sub> emission tax from rich countries to support clean technologies in poor countries«.



## POLICY RECOMMENDATION

# Low-income developing countries should contribute

There is strong support among WWViews participants to put in place short-term emission limits for low-income developing countries. The strongest demands come from citizens from the poorest countries themselves.

### OBSERVATIONS

- 89% of the participating citizens think that low-income developing countries, as a minimum, should limit the increase in their emissions in proportion to their income and the volume of greenhouse gases they emit. The more their economy expands and the greater their emissions, the more they should limit their growth in emissions.
- 41% go beyond that and say that they should even reduce emissions by 2020 compared to 1990 levels.
- In contrast to citizens' views on emission targets for Annex 1 countries and fast-growing economies, views on emission targets for low-income developing countries vary considerably across national income groups. In general, participating citizens from low-income developing countries are willing to do more than citizens from richer countries expect them to do.

### ASSESSMENTS

The WWViews results are in stark contrast to what is currently being discussed in the UN negotiations, in which no one is suggesting that low-income developing countries should commit to emission reductions by 2020.

Although participating citizens from low-income developing countries are willing to do more than others expect, the general view among WWViews participants is that what is to be done should fall within a shared but differentiated responsibility. This goes well in line with current political thinking, but WWViews participants also give their politicians a clear mandate to set emission targets for low-income developing countries.

The willingness among participants from low-income developing countries such as Malawi, the Maldives and Mozambique to do more than expected from other countries could be explained by the fact that they see themselves as the main victims of global warming. It may also be linked to the wish for technology transfer expressed in several recommendations from these countries. This sends a strong signal to politicians in both rich and poor countries about the urgency of the situation at hand.



BRAZIL

**From Mozambique:**

*»All countries contribute more or less to CO<sub>2</sub> emissions causing global warming. Accordingly, all countries must contribute with a certain tax amount according to its emissions in order to constitute a funding for the introduction and development of new technologies of clean energy that will benefit the developing countries«.*

**From Brazil:**

*»All countries should contribute to a fund that would be used for the development of new technologies to reduce greenhouse gas emissions. Everyone would be able to benefit, because although we live in a particular country, we all belong to the same planet«.*

**From Uganda:**

*»Developed countries must commit themselves to providing the funds needed, independent of existing aid packages to help vulnerable communities in poor countries to adapt to climate change«.*

**From USA, Georgia:**

*»Establish an international fund from national contributions on a sliding scale, considering income and emissions, to implement a globally standardized active learning program on climate change involving public, private, and non-profit organizations«.*

**From Bolivia:**

*«The benefits from the compensation bonuses from the most polluting countries should be destined towards: mitigation of environmental damage, preservation of ecological environments, investigation and development of innovative and sustainable technologies that support the adaptation of developing countries in relation to climate changes«.*



UGANDA

## From China:

»A financial system should be installed, in which the contributions depend on each country's economic capability. Do more research on the new energy resources and other advanced technology«.



## POLICY RECOMMENDATION

# Give high priority to an international financial mechanism

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WWViews participants express a strong wish for COP15 to institute a financial mechanism that will secure funding for mitigation and adaptation in developing countries. They expect a mechanism with automatic and mandatory payments, rather than a mechanism that is subject to individual nations' voluntary contributions.

### OBSERVATIONS

- 87% of participating citizens favour instituting a global financial mechanism in order to generate funds for mitigation and adaptation in developing countries.
- Support for such a mechanism is strongest among participants from the poorer countries.
- 84% of participants think that either all countries or all except the least developed should be committed to pay.
- Almost a third of the participants from both rich and poor countries think that all countries should pay.

### ASSESSMENTS

The wish among participants for the institution of a financial mechanism is clearly backed by a willingness to pay. The WWViews participants feel that the richest countries should pay the most and looking at their recommendations, there are several references to the historical responsibility of developed nations to make large contributions.

Many of the recommendations from the participants deal with establishing a financial mechanism and thus reinforce their concern with this issue. Most refer to the establishment of an international fund and taxation of CO<sub>2</sub> emissions.

Recommendations from participants from developing nations are more detailed and have stronger reference to the historical and economical responsibility of developed nations.

The WWViews participants clearly expect their COP15 negotiators to settle on an agreement that will include a strong and effective financial mechanism.



USA, ARIZONA

**From USA, Arizona:**

*»Make a commitment to act urgently.  
Setting clear, binding standards  
– Taxing over-consumption«.*

**From Indonesia, Makassar:**

*»Reach a final deal which binds all  
countries in the context of international  
law enforcement on environmental  
protection«.*



ST. LUCIA

**From the Netherlands:**

*»Encourage discussions about a reward  
system for countries that DO reach their  
goals within a climate deal«.*

**From St. Lucia:**

*»Make green technology more  
affordable in order to reduce  
dependency on fossil fuels«.*



INDONESIA, MAKASSAR





## POLICY RECOMMENDATION

# Punish non-complying countries

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A clear majority of WWViews participants are in support of punishing countries that do not meet their commitments under a new climate deal. They also support the introduction of incentive measures to reward behavioral change and technological development.

### OBSERVATIONS

- 83% of the participating citizens support significant punishments for those countries that do not meet their commitments under a new climate deal.
- 48% of the citizens support punishments so severe that no benefit can be gained by not meeting the commitments.
- In non-Annex 1 countries, there is 10% higher support for severe or significant punishments than in the world generally.
- The strongest support for severe punishments comes from Egypt (83%) and Bangladesh (81%).
- A number of the citizens' recommendations suggest incentives for climate-friendly action, e.g. through market incentives, reward systems and through leadership and force of example.

### ASSESSMENTS

There is much support among WWViews participants for providing a new climate deal with legal measures that help ensure that countries fulfill their commitments. The support for severe punishments for non-complying countries is highest among countries that are predicted to be among the most vulnerable to the effects of climate change, e.g. Egypt and Bangladesh.

The support for introducing severe or significant punishments is strong even among some of the U.S. states, where one might expect more market-based solutions (e.g., 90% of the respondents in the state of California support either severe or significant punishments).

The recommendations made by the citizens also include a number of ideas that emphasize rewards and incentives. This, together with the answers on punishment, indicates a wish among many citizens for implementing climate policies that balance sticks with carrots.

Around one-quarter of all the citizens' recommendations deal with standards, regulations and punishments. Many of the proposals for regulations include the idea of a supranational agency empowered to monitor and enforce the actions and outcomes specified in a climate deal.

**From India, Bangalore:**

*»Governments and corporates must fund development of clean technology and renewable energy without patent and proprietary biases«.*

**From Ethiopia:**

*»Negotiators should agree to support the identification and development of alternative energy sources. Similarly, developing countries including Ethiopia should benefit from these alternatives in the next 5-10 years«.*



AUSTRIA

**From Chile:**

*»Create an international fund to strengthen and promote the research and development of new technologies for the mass production of less polluting and alternative energies to help mitigate CO2 emissions«.*

**From Switzerland:**

*»We ask states to allocate a significant portion of their budget to incentive measures, technological innovations and setting up infrastructures with the aim of reducing greenhouse gases«.*



ETHIOPIA

**From Italy:**

*»Immediate application of the best available technologies by the creation of several non-profit organizations with the aim to develop and trade green energies at low cost«.*

**From Austria:**

*»We recommend increased research on cost-efficient CO2-low technologies and support for global technology transfer. These technologies should not be developed with a view to profits, and must be affordable to everyone«.*



CHILE



## POLICY RECOMMENDATION

# Make technology available to everyone

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Participants around the world believe that it is crucial for the COP15 negotiations to give high priority to technology transfer and investments in order to meet climate targets.

### OBSERVATIONS

- A large number of recommendations from WWViews participants on all six continents emphasise the importance of new technologies in meeting climate targets. Many recommendations stress that technology development and transfer are key to meeting strict climate targets and making a new climate deal achievable.
- Many recommendations call for making technologies cheaply or freely available to developing nations.
- Many participants see research and technology transfer as intrinsically linked to international funding mechanisms.

### ASSESSMENTS

Participants have suggested different options, including government, private sector and international interventions involving technology development and transfer. The participants clearly want strong action on these issues at COP15.

Overall there is a strong undercurrent of equity running through most of the recommendations. For many participants it is vitally important that poorer nations have easy access to cheap and environmentally friendly technologies to help them grow sustainably.

There were no direct votes on technology. Instead citizens raised this issue in their recommendations without prompting. These views appear consistently across most of the countries that took part in WWViews, regardless of economic income, official government position or short-term vulnerability to climate change.

Individual recommendations differ in what type of technology development or transfer they advocate. Some stress the role of developed countries in researching and expanding their own investment in technology to meet stricter targets. Others highlight the role of international institutions in providing new funding or transferring technology from Annex 1 to developing countries. Still other recommendations emphasise the importance of developing locally sourced technology and energy in developing nations.



**From Russia:**

*»Create an international fund where the developed countries could deposit their technologies in exchange for emissions quotas. Only poor countries can use the technologies from this fund free of charge«.*

**From Spain:**

*»[We recommend the] institution of a transnational and independent executive board with legal authority. This should be a committee of experts. Besides setting the necessary aims, it should also involve citizens«.*



SPAIN

**From Bangladesh:**

*»The new climate deal should include establishment of an international climate-court to control the states/countries responsible for causing negative climatic impacts. The Court should also evolve a legal framework to try climate cases and to bring the offenders to justice and provide opportunity for negatively affected countries to claim compensation«.*



BANGLADESH

**From France:**

*»Establish a global organization, independent and neutral...which will set achievable targets with immediate effect, set and standardize common and fair indicators for measurement of CO<sub>2</sub> emissions, and apply a non-market system of incentives and sanctions to finance adaptation and technology transfer«.*

**From Finland:**

*»A climate fund should be set up that supports the development of renewable energy. In particular open source development should be supported, ensuring free access by everyone to the developed technologies. Countries should invest in the fund a sum that corresponds to half of their military budget up until 2020«.*



## POLICY RECOMMENDATION

# Strengthen or supplement international institutions

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WWViews participants expect COP15 negotiators to ensure that new or stronger international institutions are put in place to advance the objectives of a new climate deal.

### OBSERVATIONS

- Many of the recommendations from the WWViews participants reflect a judgment that existing international institutions will have to be strengthened or supplemented. The participants consider such institutions essential to implementing a new global deal on climate change and, more generally, to responding adequately to the challenges of global warming.
- Roughly one-third of the recommendations call for the creation of new international institutions.
- About half of the institutional recommendations from WWViews participants ask to establish a new global fund or financial institution to collect and redistribute funds in support of climate change-related activities.
- Additional recommendations include creating new international institutions to develop or transfer technologies, practices and know-how. Participants from different nations variously suggest governmental, non-profit or private sector institutional innovations for this purpose.
- Many recommendations foresee a need to augment UN capabilities, or else to establish a new international institution that will monitor both national government and corporate compliance with climate change-related obligations.

### ASSESSMENTS

The WWViews participants give a clear mandate to their COP15 negotiators to strengthen existing international institutions or establish new ones.

It is noteworthy that participants – except when calling for a new global funding institution – frequently proposed institutional innovations that are neither discussed in the WWViews background informational materials nor mentioned in the questions that they answered during the WWViews meetings.

Some notably forceful and original recommendations come from participants in low-income nations that are especially vulnerable to the consequences of global warming.





### Climate change and its consequences - I

1. 1 To what extent were you familiar with climate change and its consequences before joining WWViews?

- I knew nothing
- I knew little
- I knew some
- I knew a lot
- Don't know / do not wish to answer



### Climate change and its consequences - II

1. 2 Having been presented with various assessments of climate change and its consequences, to what extent are you concerned about climate change?

- Very concerned
- Fairly concerned
- Slightly concerned
- Not concerned
- Don't know / do not wish to answer



### Long-term goal, urgency and commitment - I

2.1 How urgent do you think it is to make a global climate deal?

- It is urgent, and a deal should be made at COP15
- It is important, but it can wait a few years
- A deal can wait until serious effects of climate change occur
- I do not want a global deal
- Don't know / do not wish to answer



### Long-term goal, urgency and commitment - II

2.2 If a new climate deal is made at COP15, should the politicians in your country give high priority to joining it?

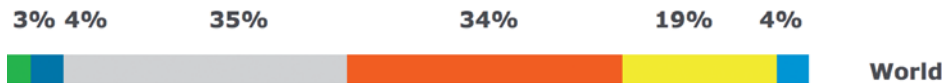
- Yes
- No
- Don't know / do not wish to answer



### Long-term goal, urgency and commitment - III

2.3 What should be the long-term goal for limiting temperature increase?

- A goal is not necessary
- A larger increase than 2 degrees Celcius is acceptable
- Limiting the increase to 2 degrees Celsius
- Limiting the increase to the current level
- Returning to the pre-industrial level
- Don't know / do not wish to answer



### Long-term goal, urgency and commitment - IV

2.4 Should countries that do not meet their commitments under a new climate deal be subjected to punishment?

- Yes, and the punishment should be so severe that no benefit can be gained by not meeting the commitments
- Yes, and the punishment should be significant
- Yes, but the punishment should be mostly symbolic
- There should be no punishment
- Don't know / do not wish to answer



### Dealing with greenhouse gas emissions - I

3.1 Do you think the short-term reduction target for developed countries should be

- Higher than 40%
- Between 25% and 40%
- Lower than 25%
- There should be no targets
- Don't know / do not wish to answer



### Dealing with greenhouse gas emissions - II

3.2 What do you think the short-term target should be for Non-Annex 1 countries with substantial economic income and/or high emissions?

- The same targets as for Annex 1 countries
- Their emissions should be somewhat reduced and increasingly so the richer they are and the more they emit
- Their growth in emissions should be somewhat limited and increasingly so the richer they are and the more they emit
- They should not be committed to control their emissions in any way
- Don't know / do not wish to answer



**Dealing with greenhouse gas emissions - III**

3.3 What do you think the short-term target should be for lower-income developing countries?

- The same targets as for Annex 1 countries
- Their emissions should be somewhat reduced and increasingly so the richer they are and the more they emit
- Their growth in emissions should be somewhat limited and increasingly so the richer they are and the more they emit
- They should not be committed to control their emissions in any way
- Don't know / do not wish to answer



**The economy of technology and adaptation - I**

4.1 Should the price of fossil fuels be increased?

- Yes, for all countries
- Yes, but only for Annex 1 countries and countries with substantial economic income and/or high emissions
- Yes, but only for Annex 1 countries
- No, there should be no regulation of prices
- Don't know / do not wish to answer



**The economy of technology and adaptation - II**

4.2 Should a global financial system be instituted in order to generate funds for mitigation and adaptation in developing countries?

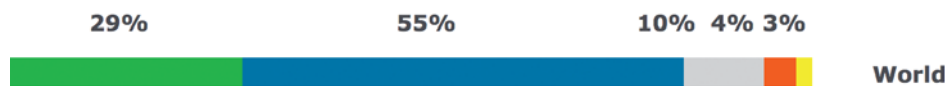
- Yes
- No
- Don't know / do not wish to answer



**The economy of technology and adaptation - III**

4.3 Which countries should be committed by a new climate deal to pay?

- All countries
- All countries (except the Least Developed Countries)
- Annex 1 countries
- No commitments should be determined
- Don't know / do not wish to answer





## LIST OF NATIONAL AND REGIONAL WWVIEWS PARTNERS

WWViews is structured as a global alliance of institutions, including public councils, parliamentary technology assessment institutions, civil society organizations and universities.

Over 50 National and Regional Partners in 38 nations are part of the WWViews Alliance.

Together, they facilitated 44 deliberations on September 26, 2009.

### **Australia**

Institute for Sustainable Futures,  
University of Technology, Sydney

### **Austria**

Institute for Technology  
Assessment (ITA), Austrian  
Academy of Science

### **Bangladesh**

INCIDIN

### **Belgium (Flanders)**

Flemish Parliamentary Technology  
Assessment

### **Bolivia**

Lidema

### **Brazil**

Coalition: Observatório do  
Clima + Centro de Estudos em  
Sustentabilidade

### **Cameroon**

ADEID – Action pour un  
Développement Équitable, Intégré  
et Durable

### **Canada**

Faculty of Communication and  
Culture, University of Calgary

### **Chile**

Centro Shalom

### **China**

UNEP Tongji Institute of  
Environment for Sustainable  
Development

### **Denmark**

Danish Board of Technology

### **Egypt**

Care Egypt

### **Ethiopia**

British Council Ethiopia

### **Finland**

National Consumer Research  
Centre Finland

### **France**

Cité des Sciences et de l'Industrie

### **Germany**

Institute of Technology  
Assessment, Karlsruhe Institute of  
Technology – KIT

### **India, Delhi**

Centre for Studies in Science Policy

### **India, Bangalore**

Centre for Social Markets

### **Indonesia, Jakarta**

Dana Mitra Lingkungan

### **Indonesia, Makassar,**

Enlightening Indonesia

### **Italy**

Department of Political Science,  
University of Bologna

### **Japan**

Centre for the Study of  
Communication-Design, Osaka  
University

### **Malawi**

Coalition: British Council Malawi +  
Care Malawi

### **Maldives**

Strength of Society

### **Mali**

Centre Djoliba

### **Mozambique**

Coalition: Impacto + Fundação para  
o Desenvolvimento da Comunidade

### **Netherlands**

The Rathenau Institute

### **Norway**

Norwegian Board of Technology

### **Russia**

Friends of the Baltic

### **Saint Lucia**

St. Lucia National Trust

### **South Africa**

Ikhwezi Community College of  
Education

### **Spain**

Coalition: Research Unit on  
Scientific Culture of CIEMAT +  
University Institute of Science and  
Technology Studies in Salamanca +  
Organizacion de estados Ibero-  
americanos

### **Sweden**

Nordregio

### **Switzerland**

Coalition: TA-Swiss – Centre for  
Technology Assessment + Interface  
sciences-société, University of  
Lausanne + University of Lugano

### **Chinese Taipei**

Coalition: Taiwan Institute for  
Sustainable Energy + College of  
Social Sciences, National Taiwan  
University

### **Uganda**

FRA – Food Rights Association

### **United Kingdom**

Involve

### **USA, Arizona**

CSPO at Arizona State University

### **USA, California**

Coalition: The Loka Institute +  
Pomona College

### **USA, Colorado**

Colorado School of Mines

### **USA, Georgia**

Georgia Institute of Technology

### **USA, Massachusetts**

Coalition: Boston Museum of  
Science + Boston University, Dept.  
of Environmental Health + The  
Brookfield Institute

### **Uruguay**

Simurg

### **Vietnam**

Urban-Rural solutions





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On WWViews Day the participants watched four information videos. The videos can be seen on [www.wviews.org](http://www.wviews.org)







CANADA



DENMARK



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USA, CALIFORNIA



*World Wide Views on Global Warming involved roughly 4,000 citizens in 38 countries spanning six continents. The citizens gathered in their respective nations to deliberate about the core issues at stake in the December 2009 UN negotiations on climate change. They received balanced information about climate change, discussed with fellow citizens and expressed their own views. They did so in daylong meetings on September 26, 2009.*