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**A D I L N A J A M**

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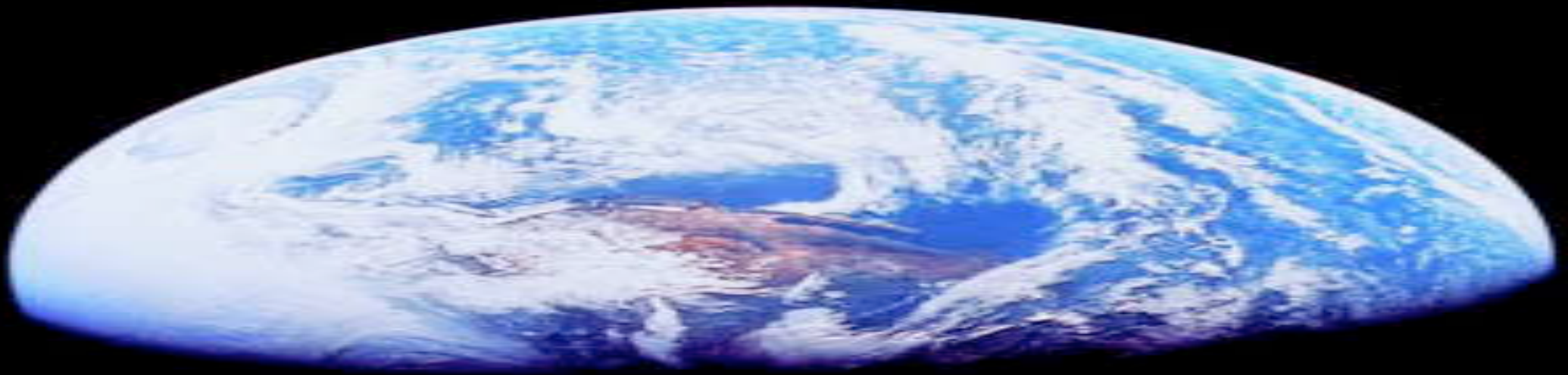
*The Frederick S. Pardee Professor of Global Public Policy*

**PARDEE CENTER FOR THE STUDY OF THE LONGER-TERM FUTURE**

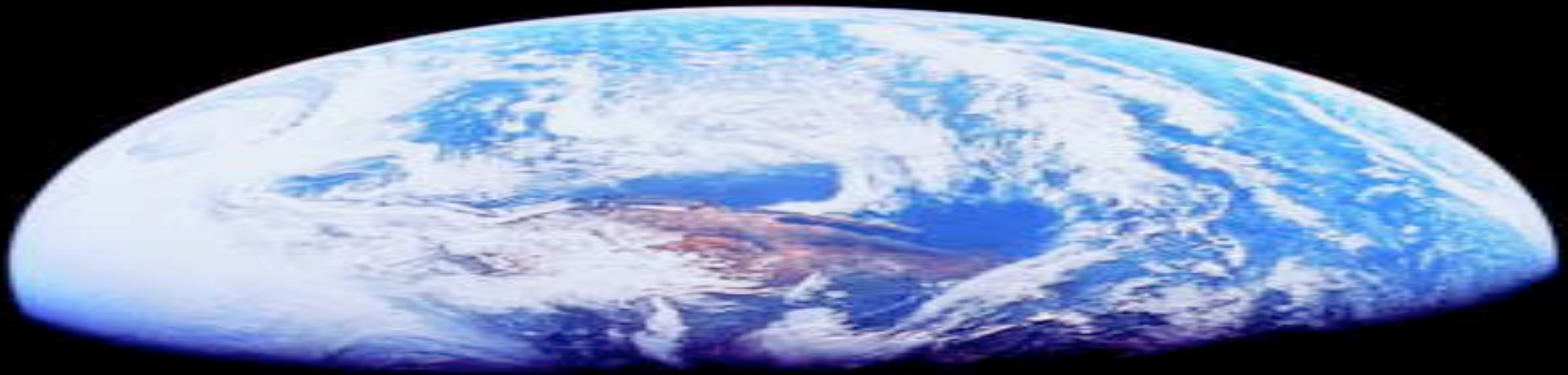
**B O S T O N U N I V E R S I T Y**



# Questions?



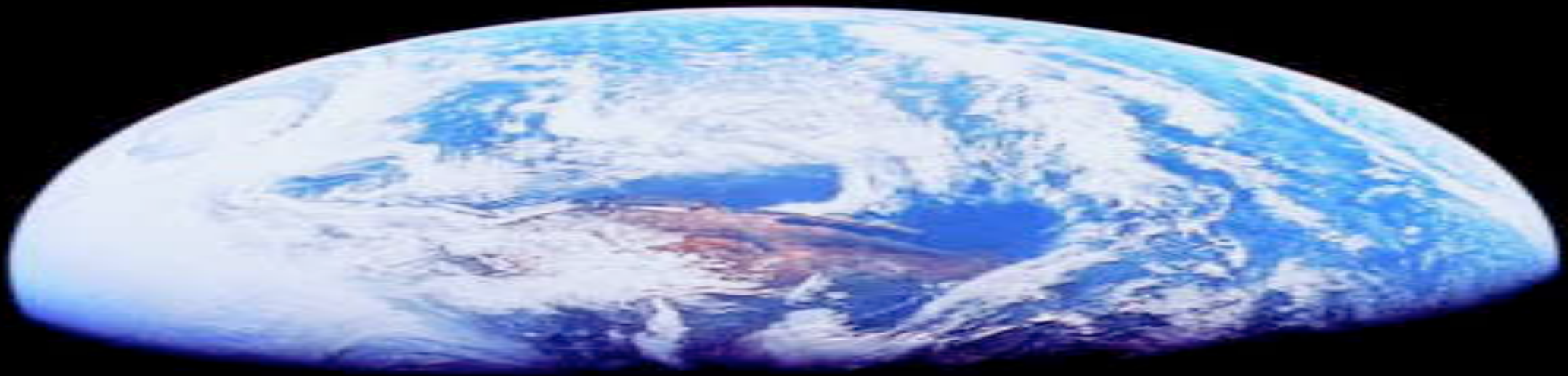
*What are future trends in the politics of climate, development and security?*





*What are future trends in the politics of climate, development and security?*

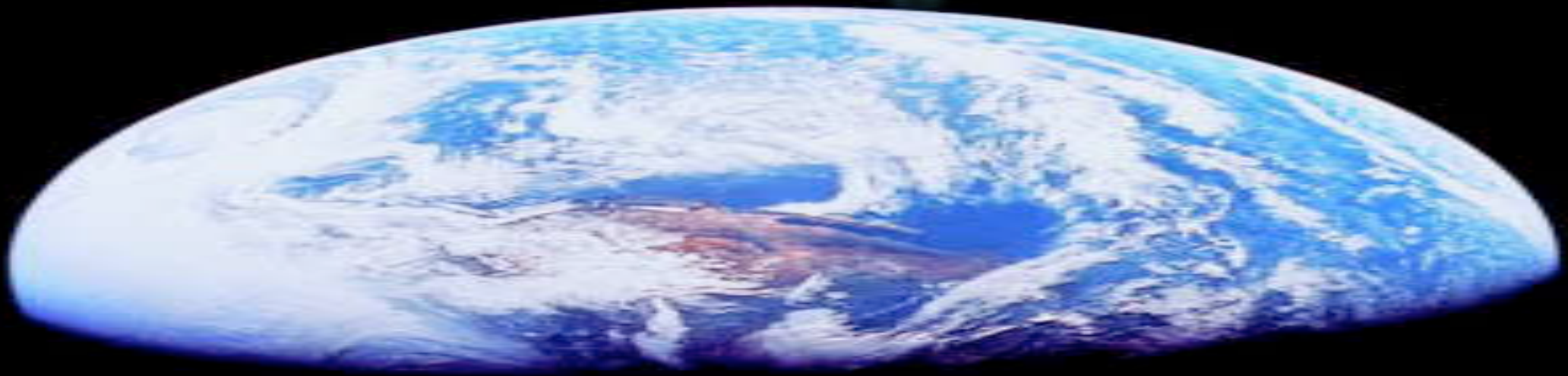
*What is the nature of “globalness” in our globalized world?*



*What are future trends in the politics of climate, development and security?*

*What is the nature of “globalness” in our globalized world?*

*How have we tackled a truly global problem like climate change till now?*

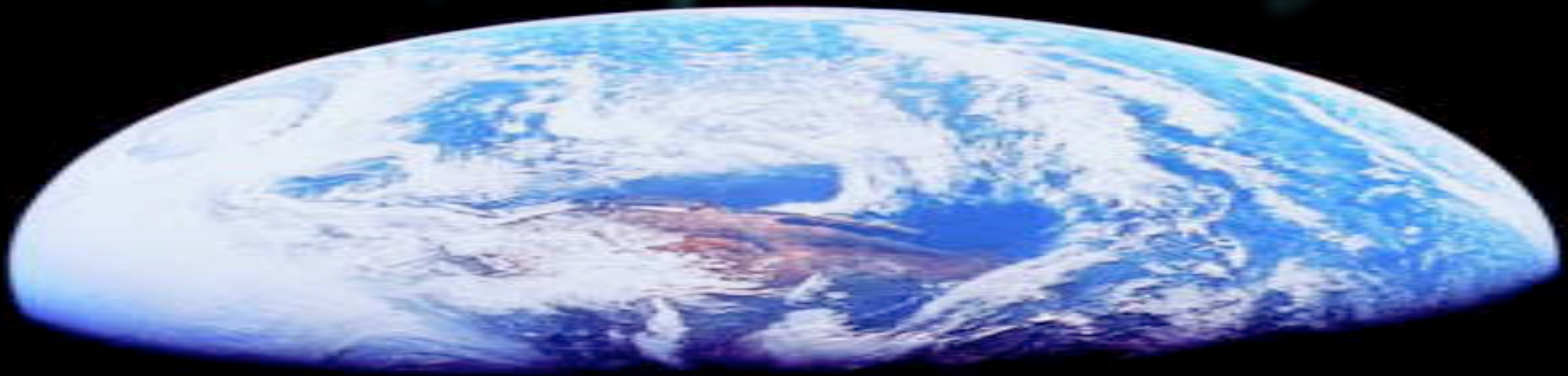




*What is the nature of “globalness” in our globalized world?*

*How have we tackled a truly global problem like climate change till now?*

*What are future trends in the politics of climate, development and security?*







T H R E E   S H O R T   S T O R I E S

BOSTON  
UNIVERSITY



# THREE SHORT STORIES



# OSTON IVERSITY

#1.

CONTEXT:

*Planetary*

*Designs*



# THREE SHORT STORIES



ON  
SITY

#1.

CONTEXT:  
*Planetary  
Designs*

#2.

CASE:  
*Stumbling  
Forward*



# THREE SHORT STORIES



#1.

CONTEXT:  
*Planetary  
Designs*



#2.

CASE:  
*Stumbling  
Forward*



#3.

CHOICES:  
*Road  
Blocks*



# THREE SHORT STORIES



#1.

CONTEXT:  
*Planetary  
Designs*

#2.

CASE:  
*Stumbling  
Forward*

#3.

CHOICES:  
*Road  
Blocks*



# THREE SHORT STORIES



A slightly  
Disturbing  
Story

#1.

CONTEXT:  
*Planetary  
Designs*



A slightly  
Inspiring  
Story

#2.

CASE:  
*Stumbling  
Forward*

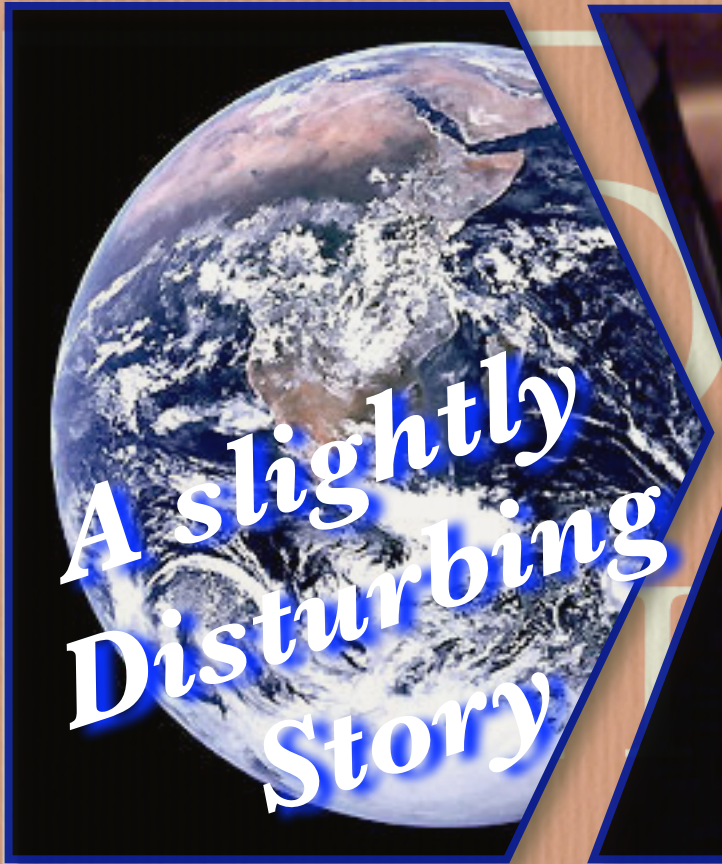


#3.

CHOICES:  
*Road  
Blocks*



# THREE SHORT STORIES



A slightly  
Disturbing  
Story

#1.

CONTEXT:  
*Planetary  
Designs*



A slightly  
Inspiring  
Story

#2.

CASE:  
*Stumbling  
Forward*



A Story  
Not Yet  
Written

#3.

CHOICES:  
*Road  
Blocks*



# THREE SHORT STORIES



#1.

CONTEXT:  
*Planetary  
Designs*

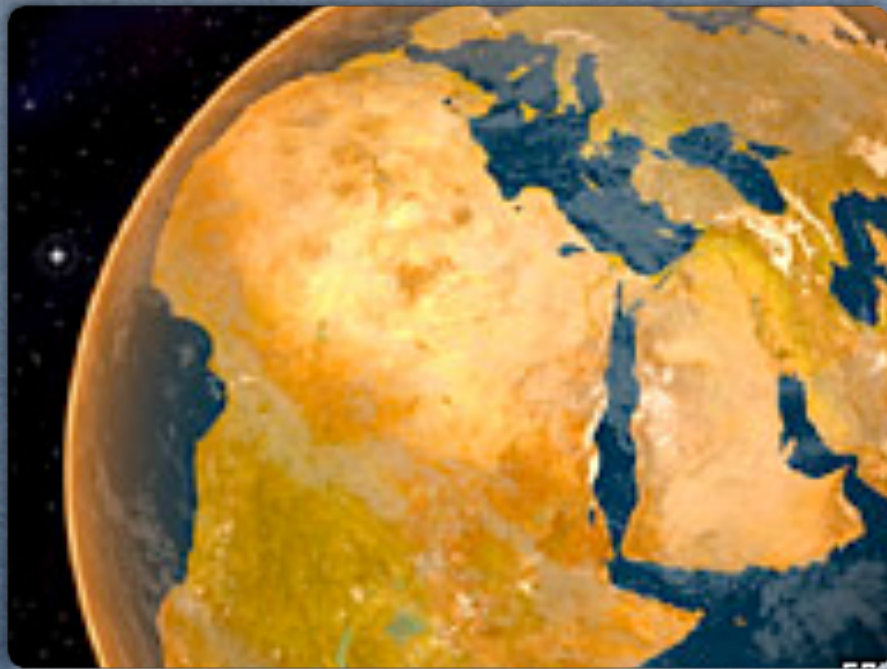
#2.

CASE:  
*Stumbling  
Forward*

#3.

CHOICES:  
*Road  
Blocks*







# Our Planet: Our Country





# Our Planet: Our Country



Imagine, if the world  
were one country...





A spiral-bound notebook with a white page. The spiral binding is at the top. The text "If the World was a Country.." is written in a bold, blue, sans-serif font at the top of the page.

**If the World was a Country..**



# If the World was a Country..



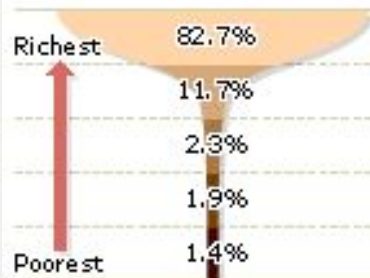
*It would be a very  
Poor Country*

# If the World was a Country..



*It would be a very  
Poor Country*

Distribution of world  
income  
Each band represents an equal  
fifth of the world population



Source: UNDP, 1989

*It would be a very  
Divided Country*

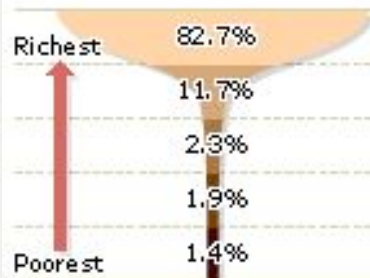


# If the World was a Country..



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Distribution of world  
income  
Each band represents an equal  
fifth of the world population



Source: UNDP, 1989

*It would be a very  
Divided Country*



*It would be a very  
Degraded Country*

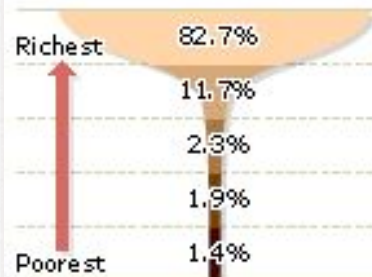


# If the World was a Country..



*It would be a very  
Poor Country*

Distribution of world  
income  
Each band represents an equal  
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Source: UNDP, 1989

*It would be a very  
Divided Country*



*It would be a very  
Degraded Country*



*It would be a very  
Insecure Country*

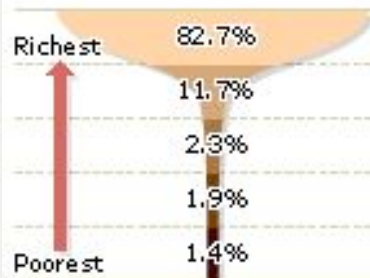


# If the World was a Country..



*It would be a very Poor Country*

Distribution of world income  
Each band represents an equal fifth of the world population



Source: UNDP, 1989

*It would be a very Divided Country*



*It would be a very Degraded Country*



*It would be a very Insecure Country*



*It would be Poorly Governed Country*

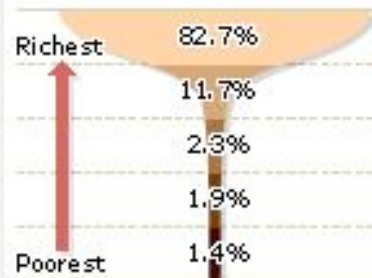


# If the World was a Country..



*It would be a very Poor Country*

Distribution of world income  
Each band represents an equal fifth of the world population



Source: UNDP, 1989

*It would be a very Divided Country*



*It would be a very Degraded Country*



*It would be a very Insecure Country*



*It would be Poorly Governed Country*



*It would be an Unsafe Country*





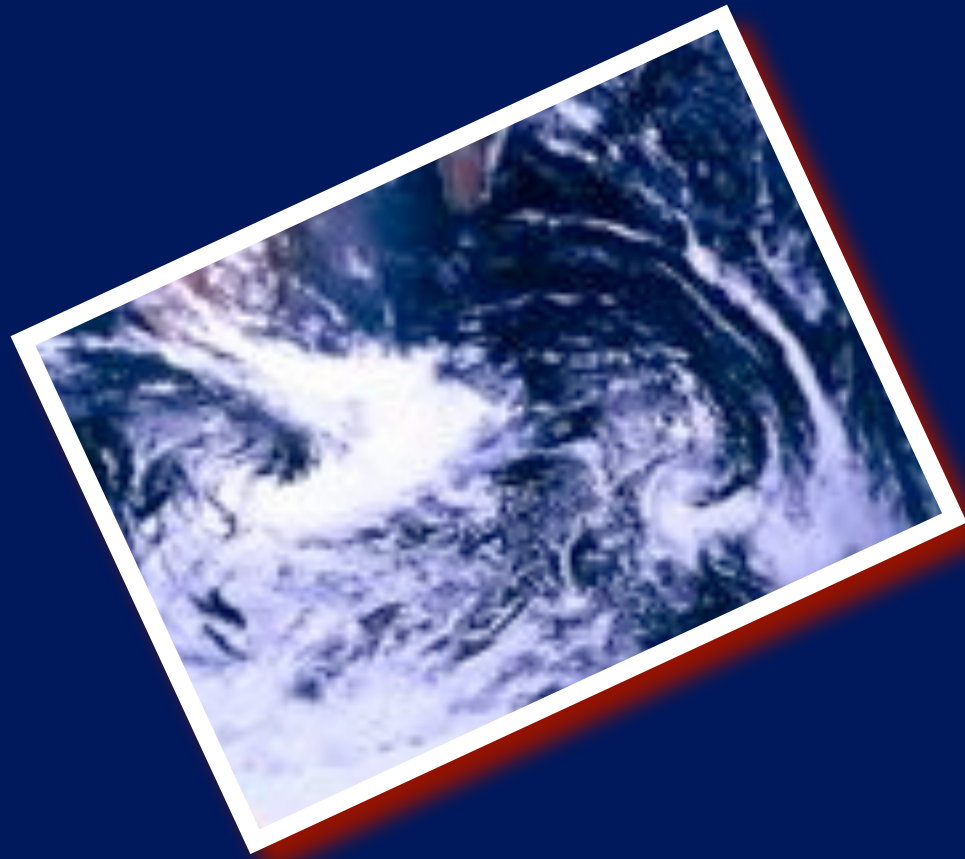




Our World  
is a Third World Country



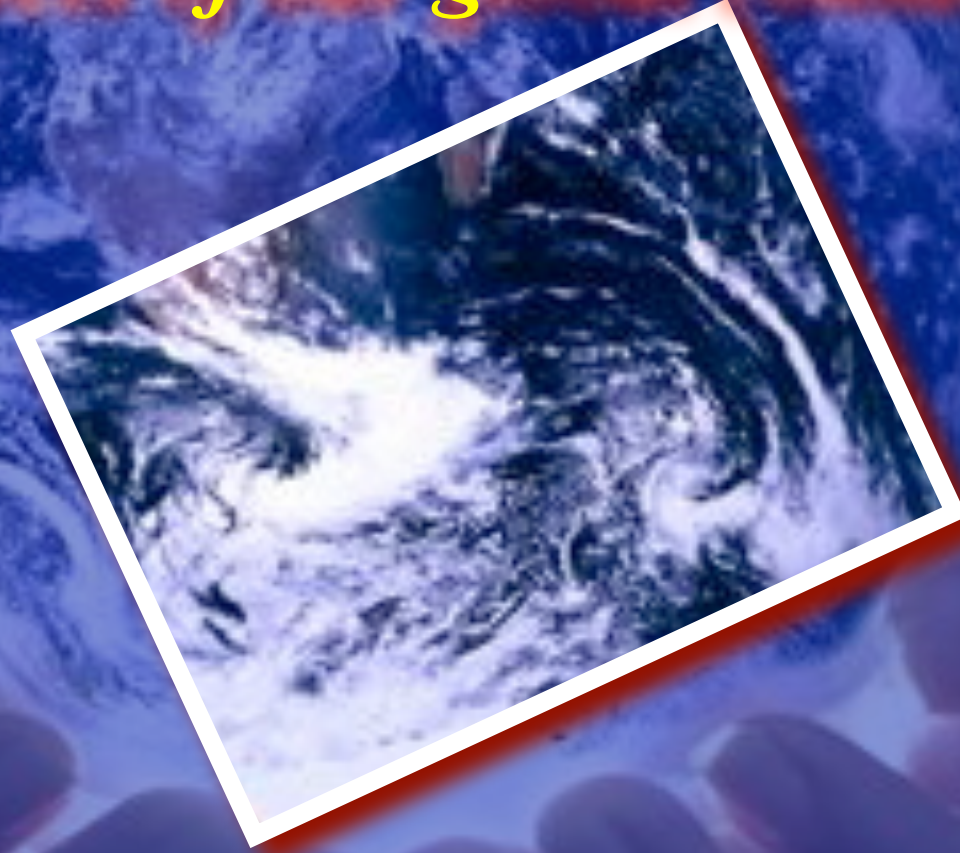
# *Why Does this Matter*





# *Why Does this Matter*

*The connectedness of environmental challenges forces us to confront otherwise neglected aspects of our global connectedness.*



# *Why Does this Matter*

*The connectedness of environmental challenges forces us to confront otherwise neglected aspects of our global connectedness.*

Many environmental issues are global; climate is *the* quintessential global challenges



# *Why Does this Matter*

*The connectedness of environmental challenges forces us to confront otherwise neglected aspects of our global connectedness.*

Environmental  
challenges are  
essentially challenges  
of insecurity.



# *Why Does this Matter*

*The connectedness of environmental challenges forces us to confront otherwise neglected aspects of our global connectedness.*

The development and insecurity aspects of environment invite us to rethink how we manage a “Third World Planet.”

# *Why Does this Matter*

*The connectedness of environmental challenges forces us to confront otherwise neglected aspects of our global connectedness.*







# SUSTAINABLE DEVELOPMENT









*What about  
Environment?*



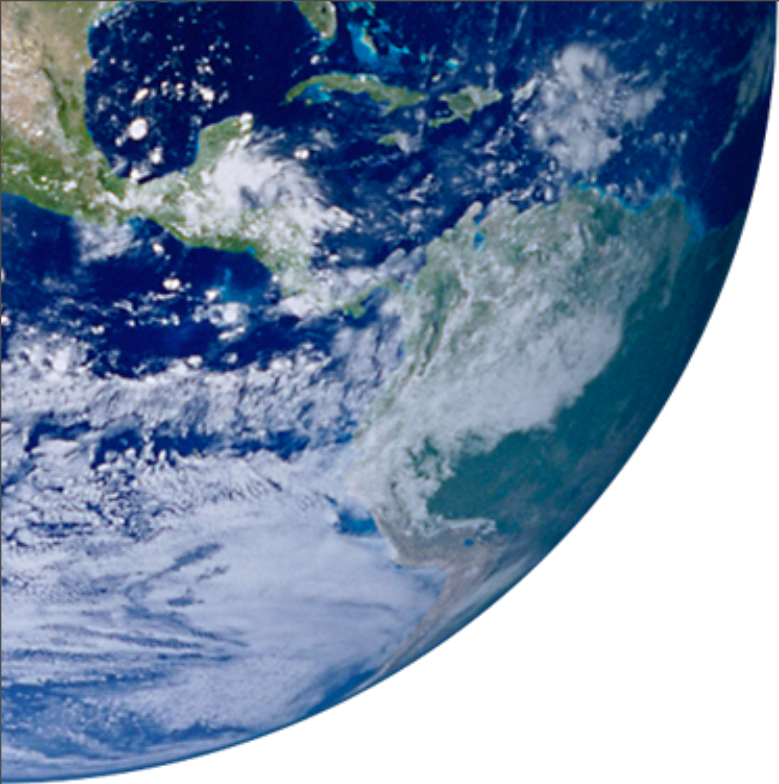


*What about  
Development?*



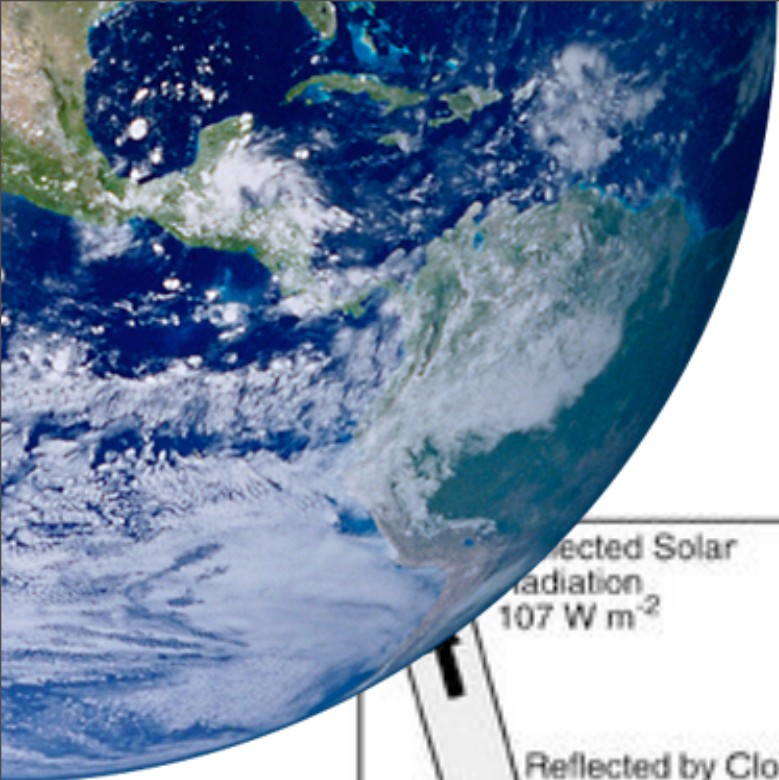






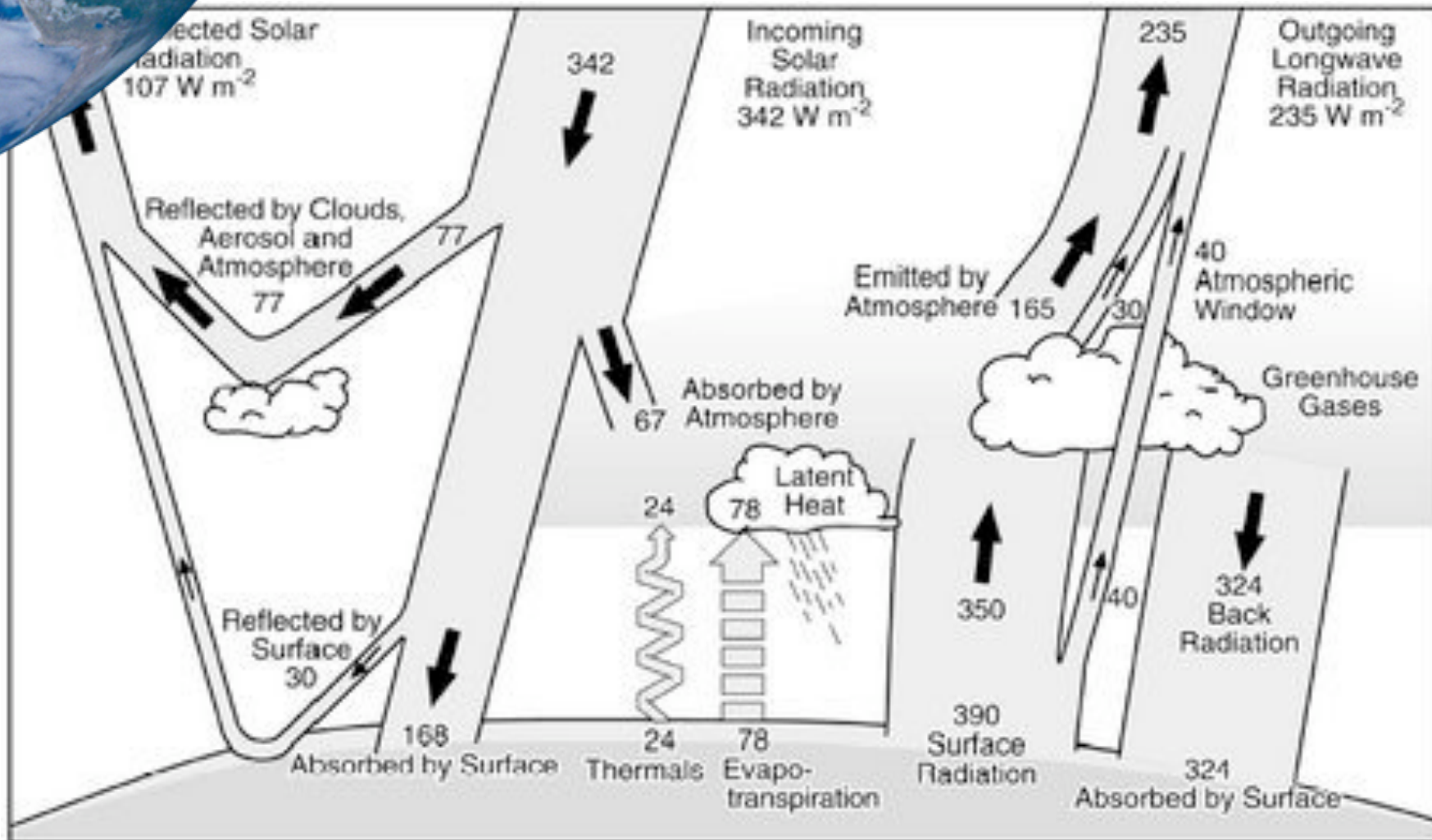
# Understanding Climate Change





# Understanding Climate Change

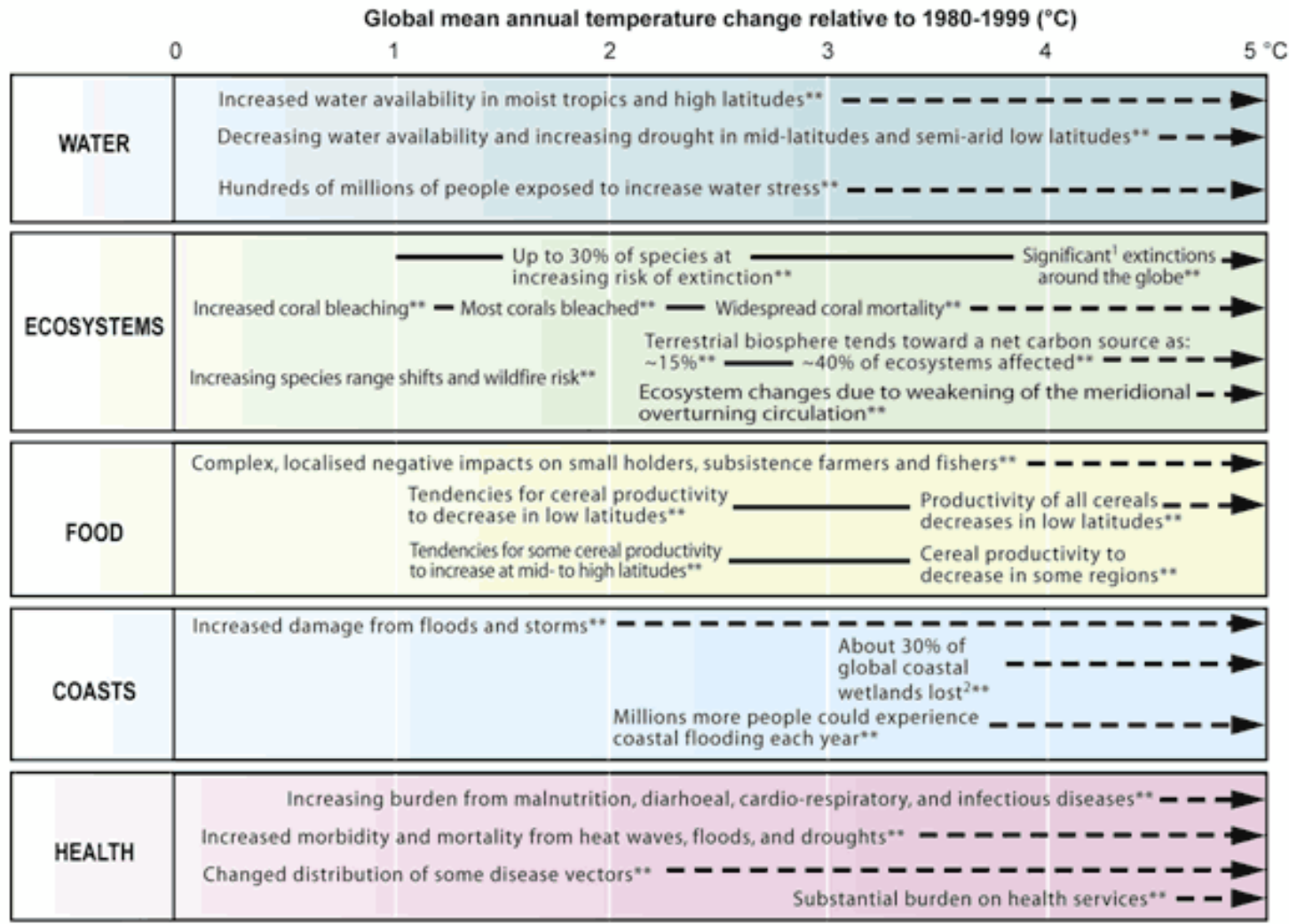
We, generally, know how it happens.





# Understanding Climate Change

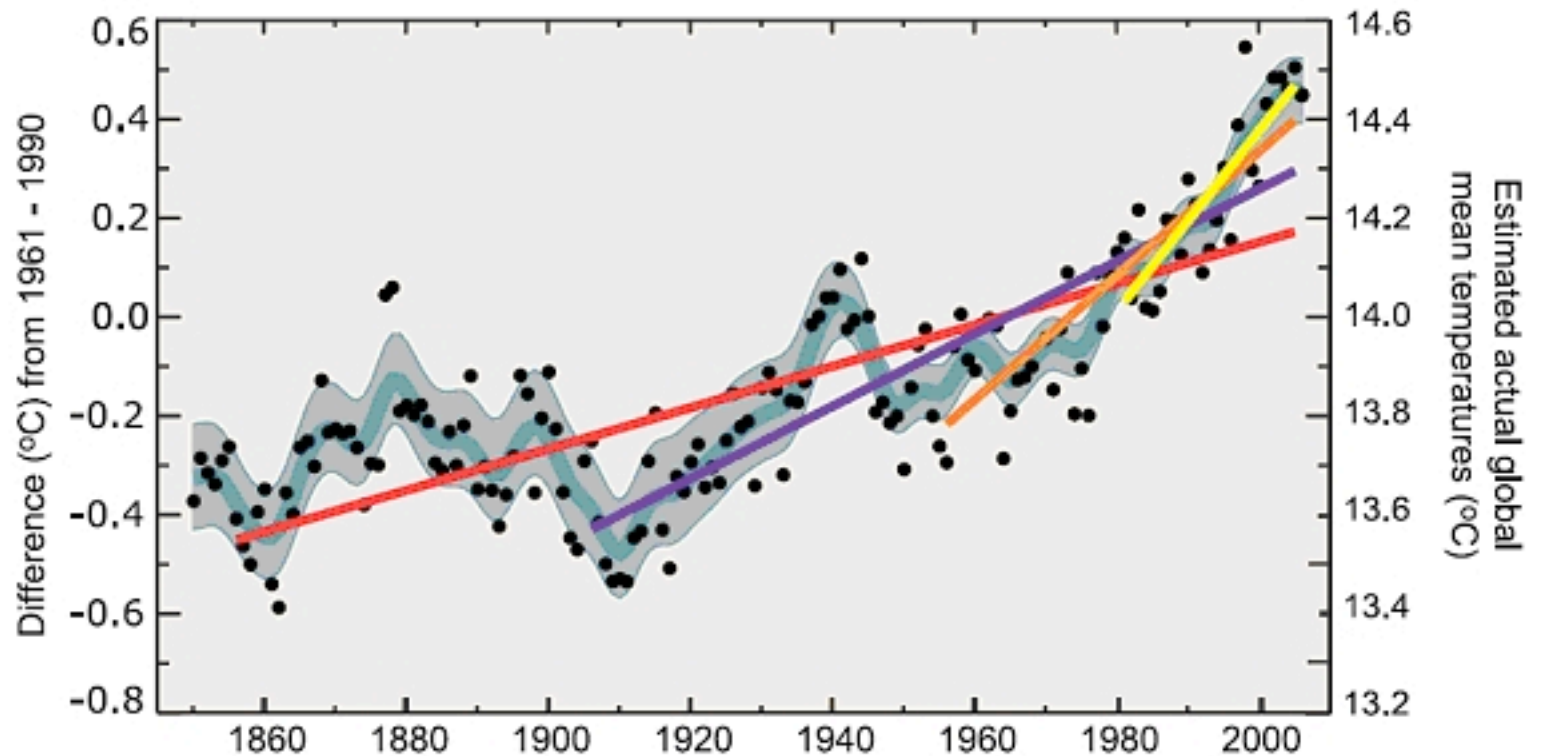
We know what can happen because of it.





# Understanding Climate Change And we know that it is happening.

Global Mean Temperature



Legend	Period (Years)	Rate (°C per decade)
● Annual mean		
— Smoothed series		
■ 5-95% decadal error bars		
	25	0.177±0.052
	50	0.128±0.026
	100	0.074±0.018
	150	0.045±0.012

# Understanding Climate Change

And we know that it is happening.

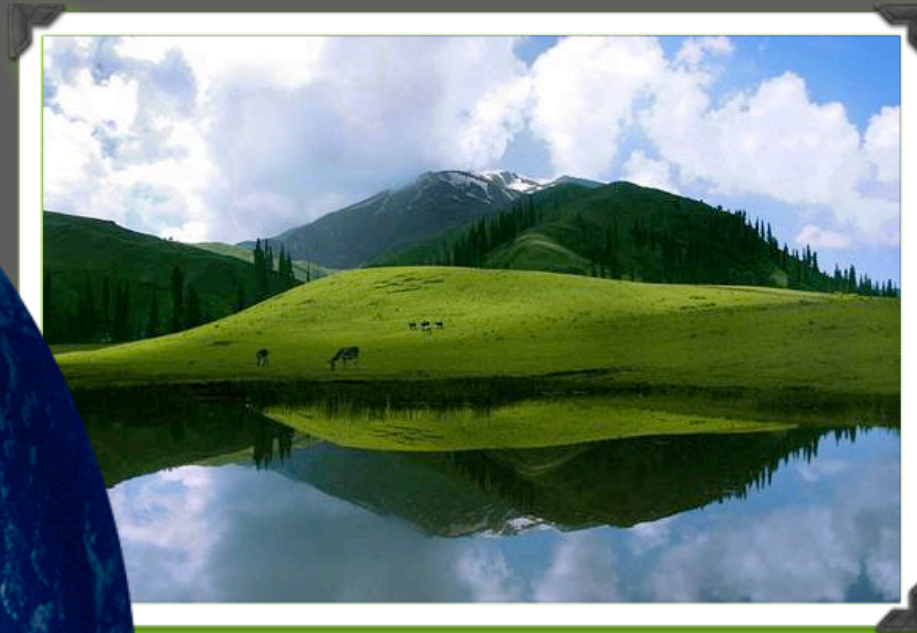
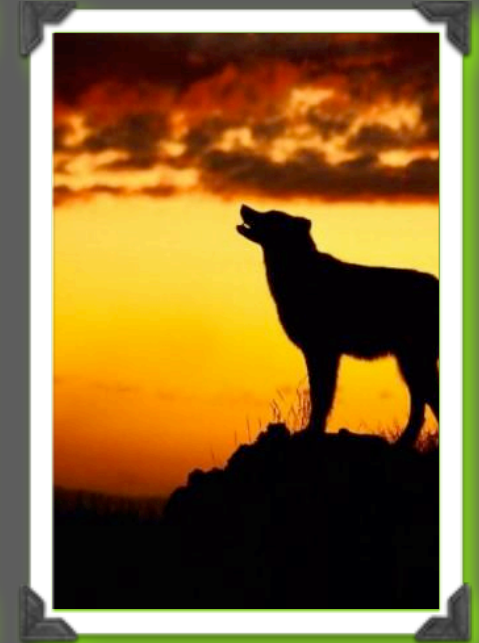
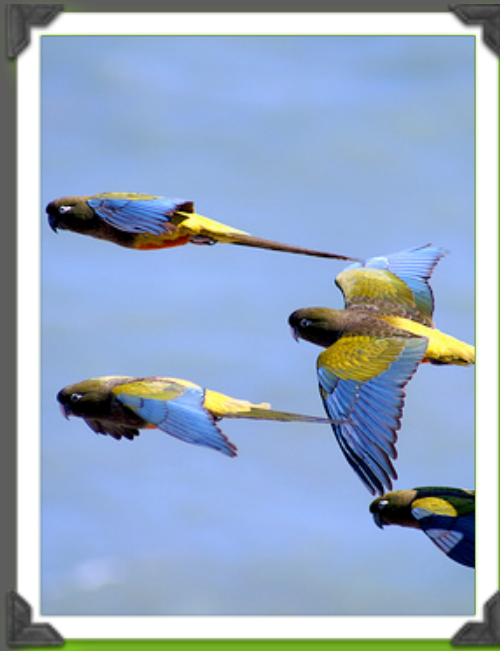




# *Environment or Development?*



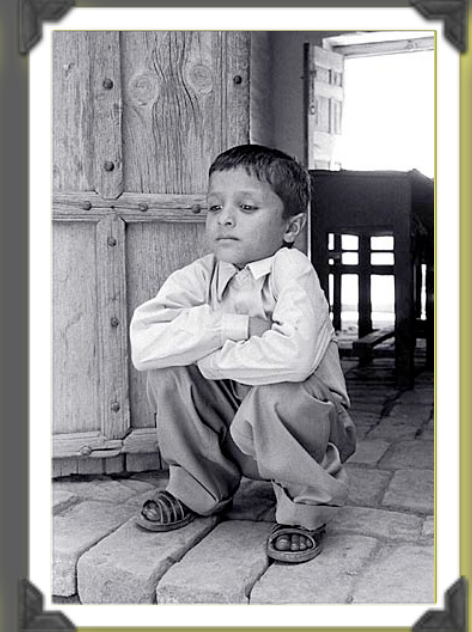
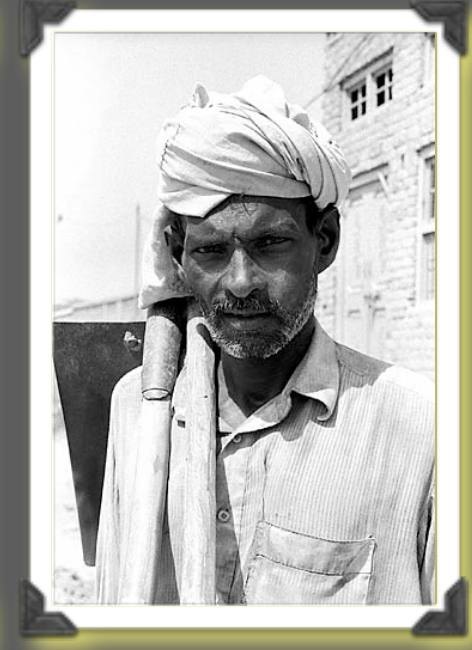
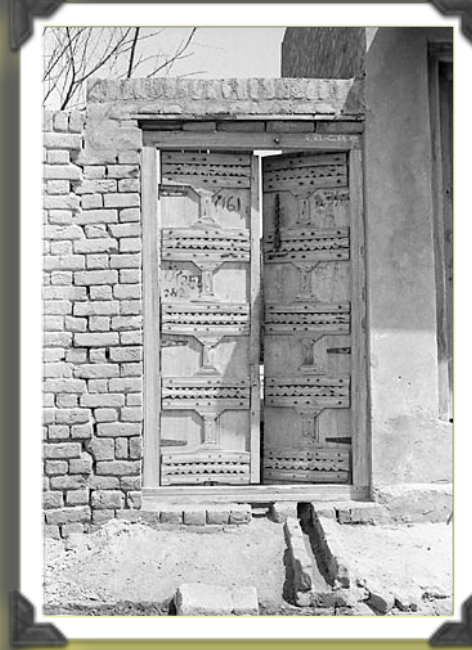
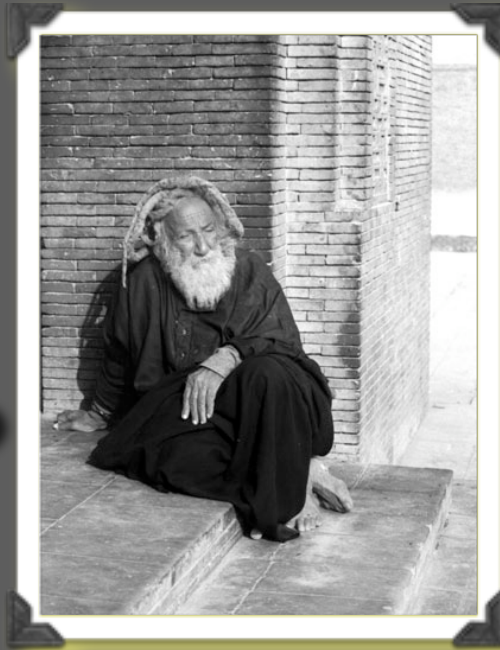
# *Environment or Development?*



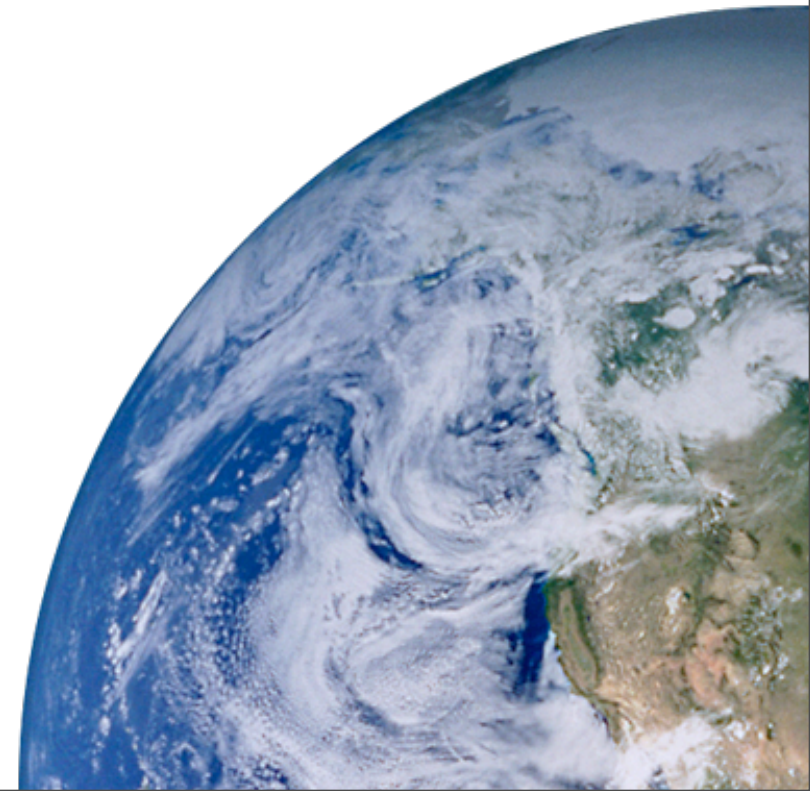


# *Environment or Development?*

*Is this  
Even a  
Choice?*



# *Climate Change*





# *Climate Change*

*Can you have*

*Sustainable*

*Development without*

*effective Climate*

*Stabilization?*



# Climate Change

*Can you have  
Sustainable  
Development without  
effective Climate  
Stabilization?*

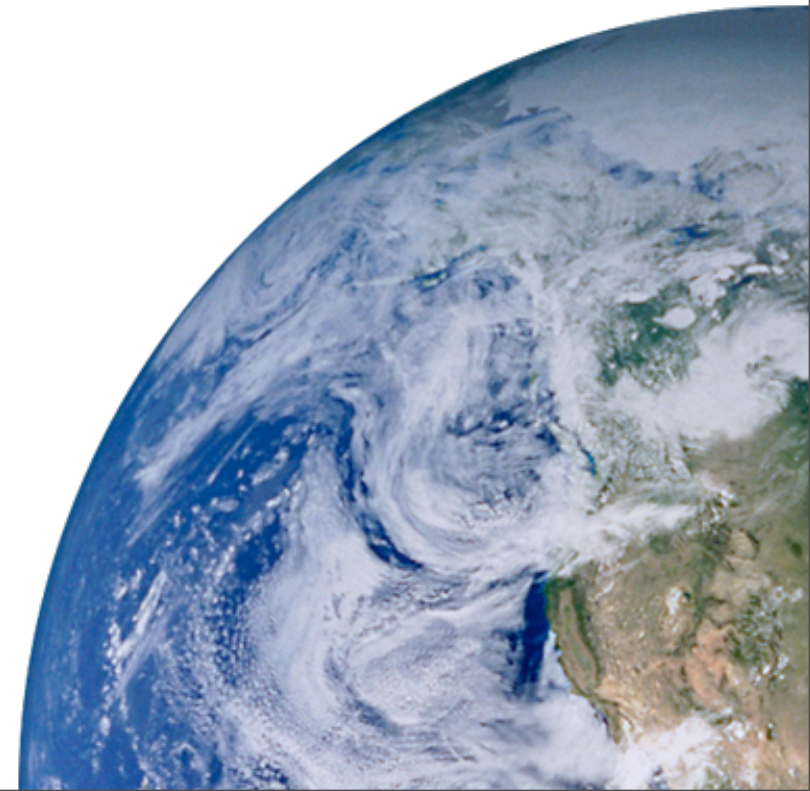


# NO



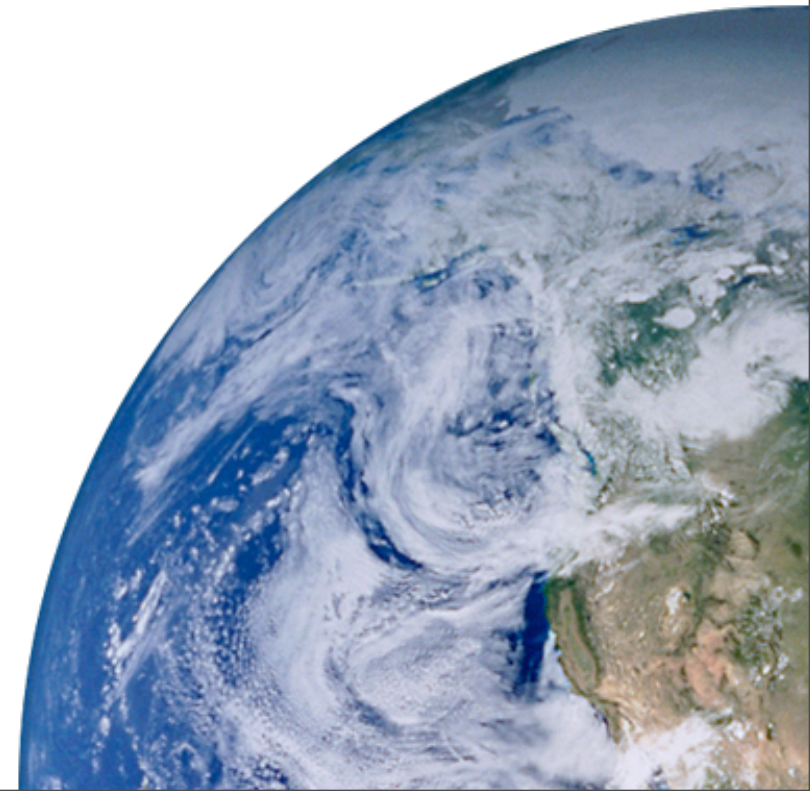


# *Climate Change*



# *Climate Change*

*Can you have  
Climate Stabilization  
without effective  
Sustainable  
Development?*





# *Climate Change*

*Can you have  
Climate Stabilization  
without effective  
Sustainable  
Development?*

**MAYBE**

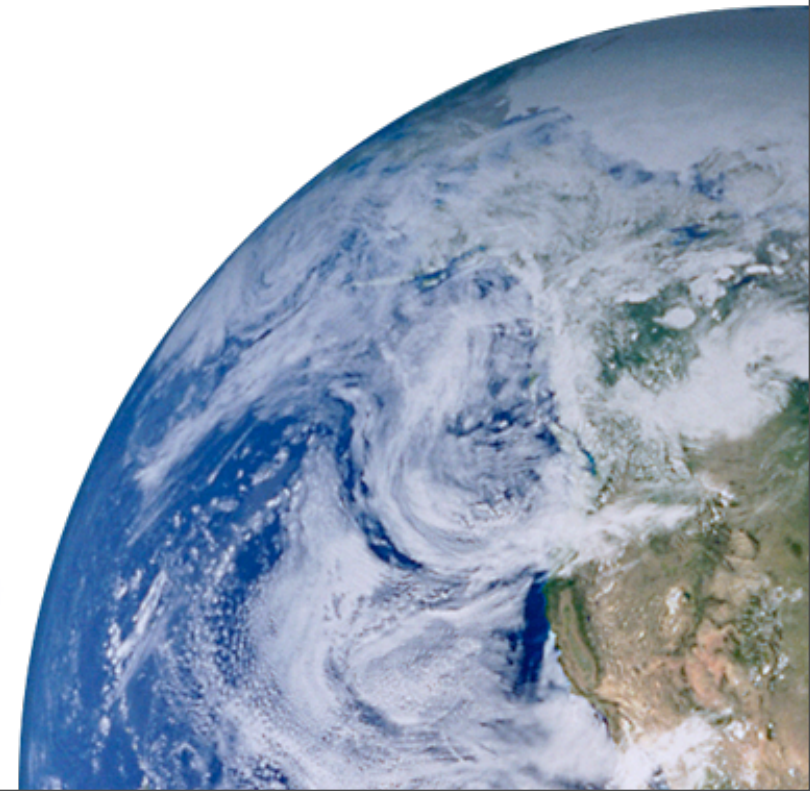


# *Climate Change*

*Can you have  
Climate Stabilization  
without effective  
Sustainable  
Development?*

**MAYBE**

*But beware of the costs!*





# *Climate Change*

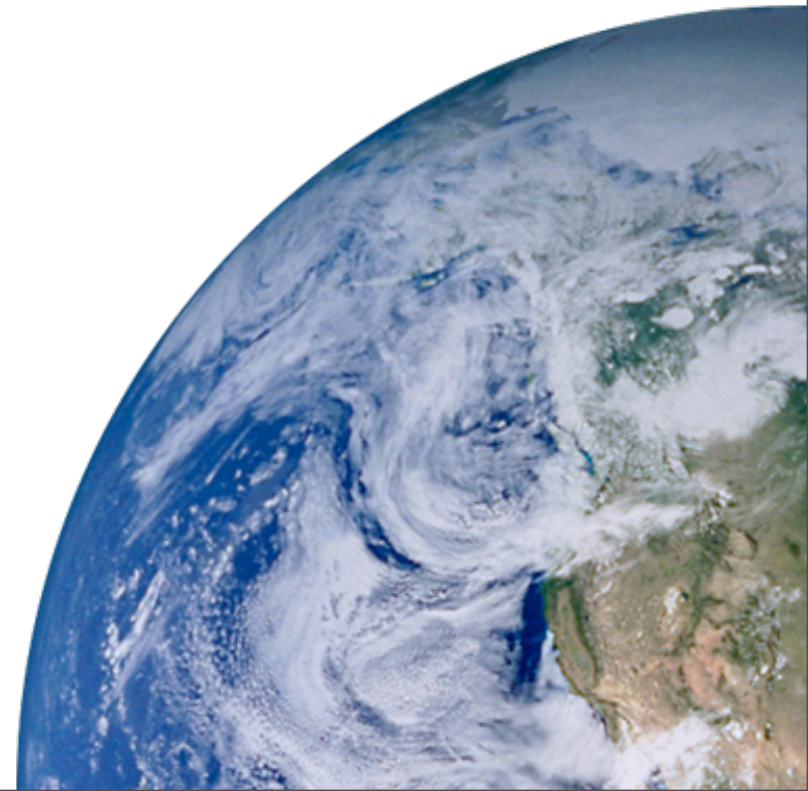
*Can you have  
Climate Stabilization  
without effective  
Sustainable  
Development?*

**Procedural  
Costs**



**MAYBE**

*But beware of the costs!*



# Climate Change

*Can you have  
Climate Stabilization  
without effective  
Sustainable  
Development?*

**Procedural  
Costs**



**Political  
Costs**



**MAYBE**

*But beware of the costs!*





# Climate Change

*Can you have  
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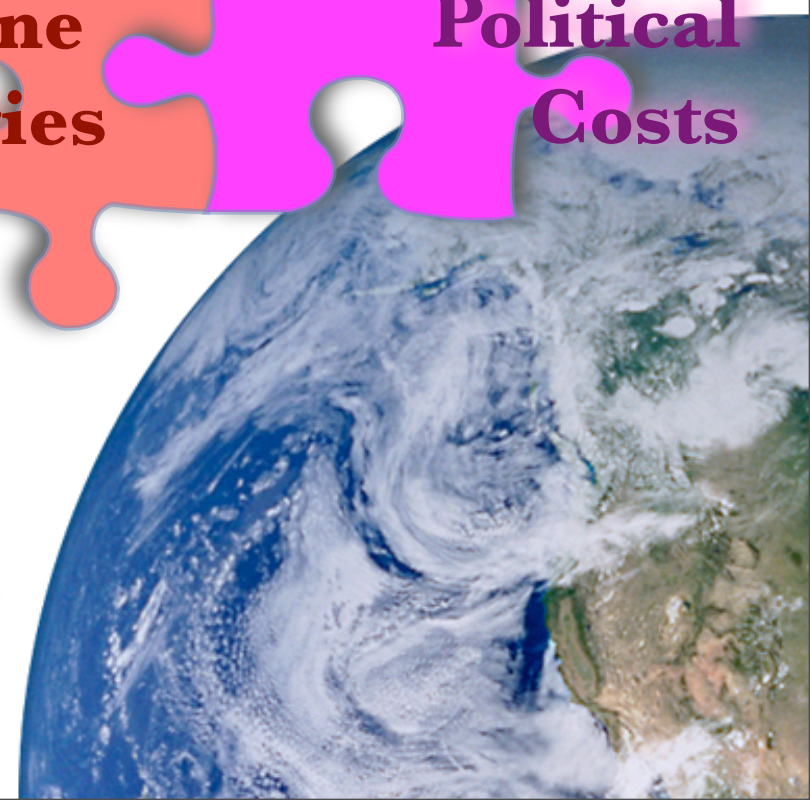
**Procedural  
Costs**

**Foregone  
Synergies**

**Political  
Costs**

**MAYBE**

*But beware of the costs!*



# Climate Change

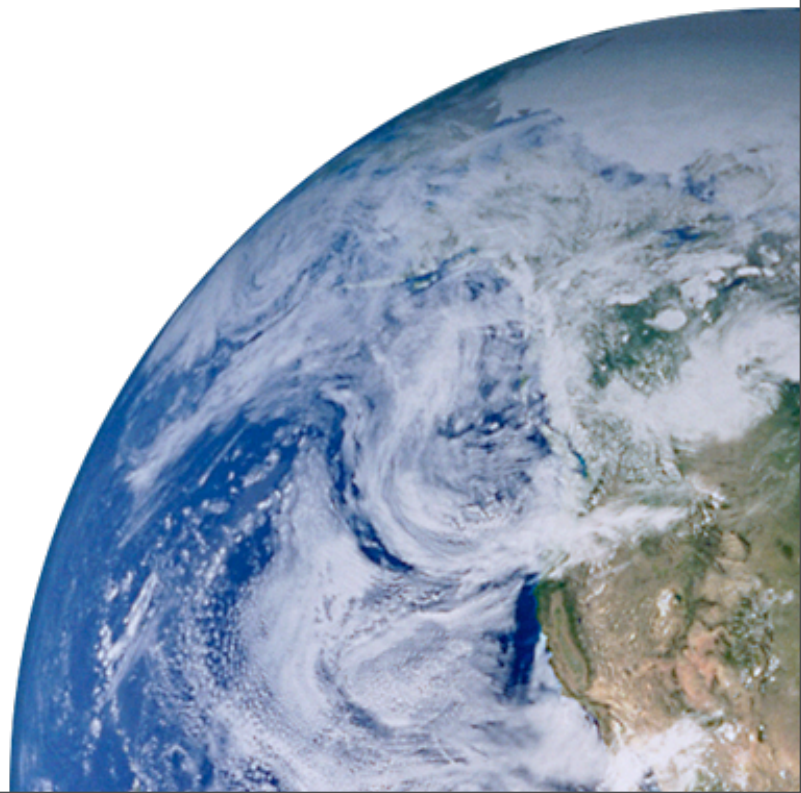
*Can you have  
Climate Stabilization  
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Development?*

**MAYBE**

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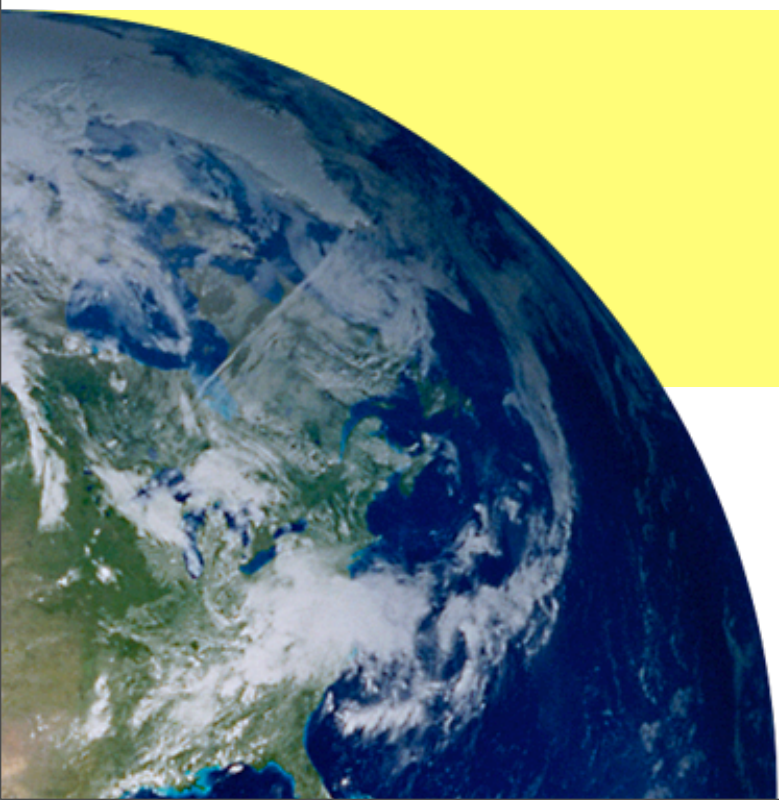








**The mandate to  
link CC and SD**

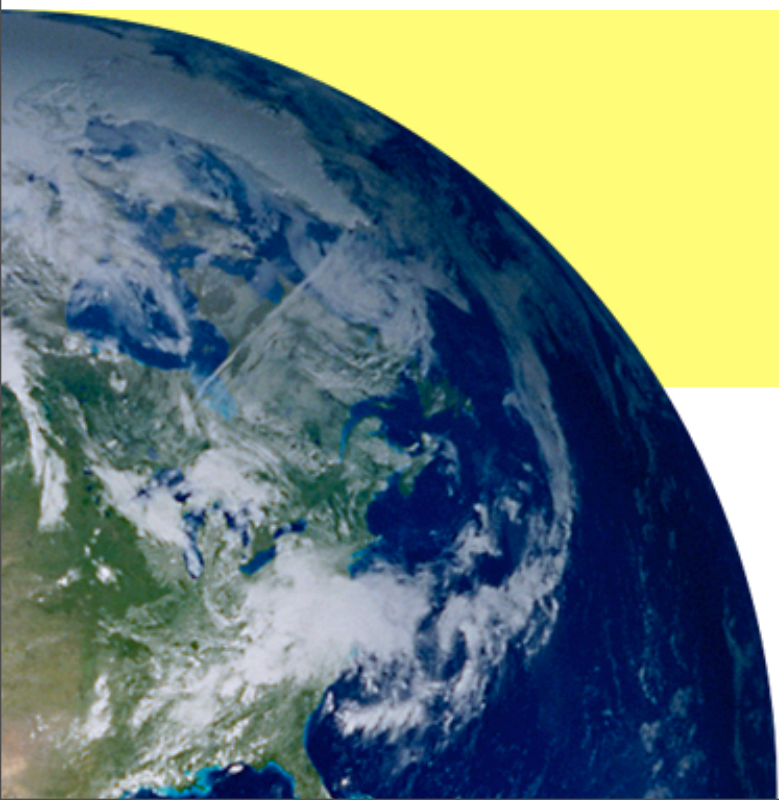


# **The mandate to link CC and SD**





# UNFCCC Article 2 & Article 3



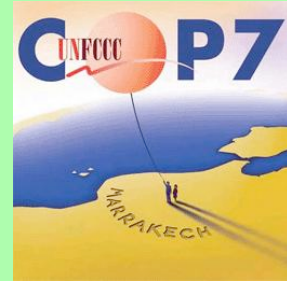
**The mandate to  
link CC and SD**



# UNFCCC Article 2 & Article 3



# Kyoto Protocol Article 2 & Article 10



# The mandate to link CC and SD

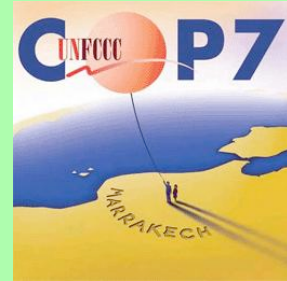




# UNFCCC Article 2 & Article 3



# Kyoto Protocol Article 2 & Article 10



CLIMATE CHANGE 2001  
Mitigation



Contribution of Working Group III to the Third Assessment Report of the Intergovernmental Panel on Climate Change



# IPCC Findings SRES Report

INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE (IPCC)



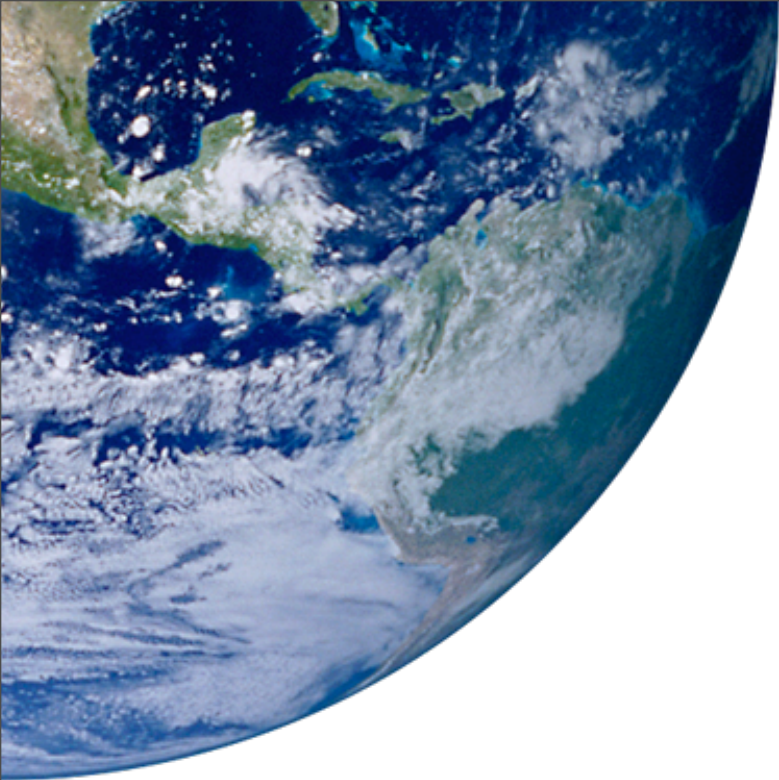
CLIMATE CHANGE 2001  
The Scientific Basis



# The mandate to link CC and SD









# ***A Conceptual Evolution***





# *A Conceptual Evolution*



**Emissions**



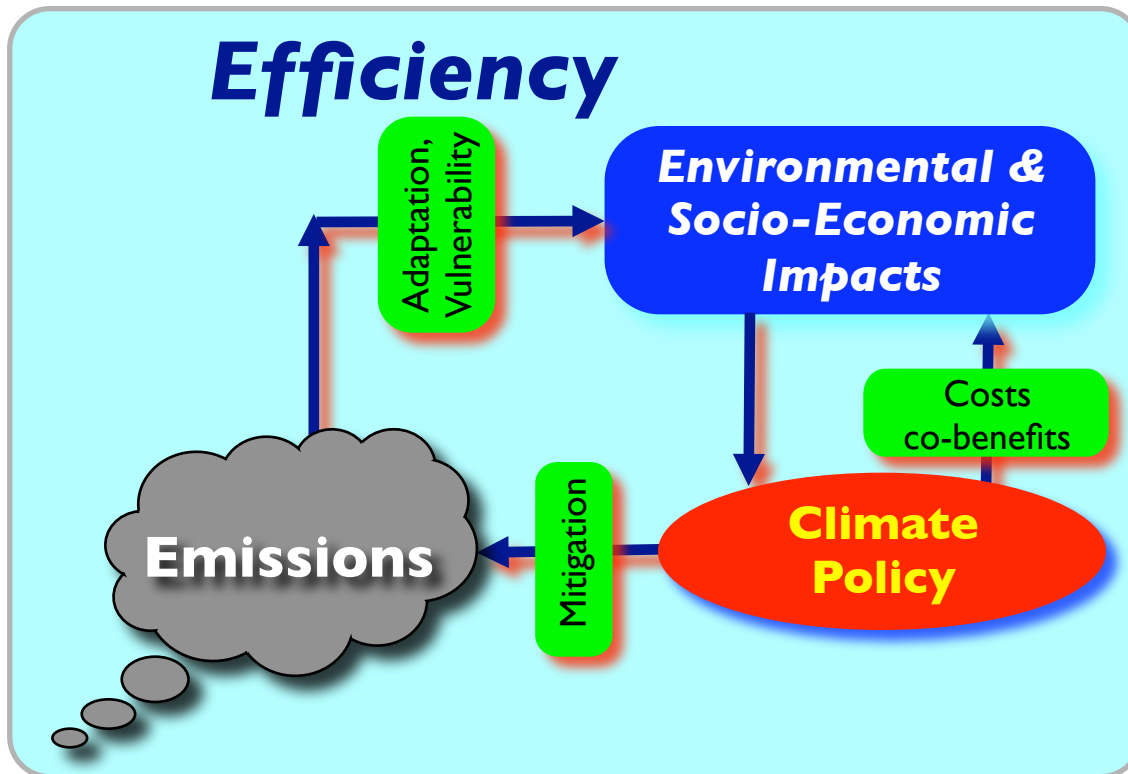
# *A Conceptual Evolution*

**Efficiency**

**Emissions**



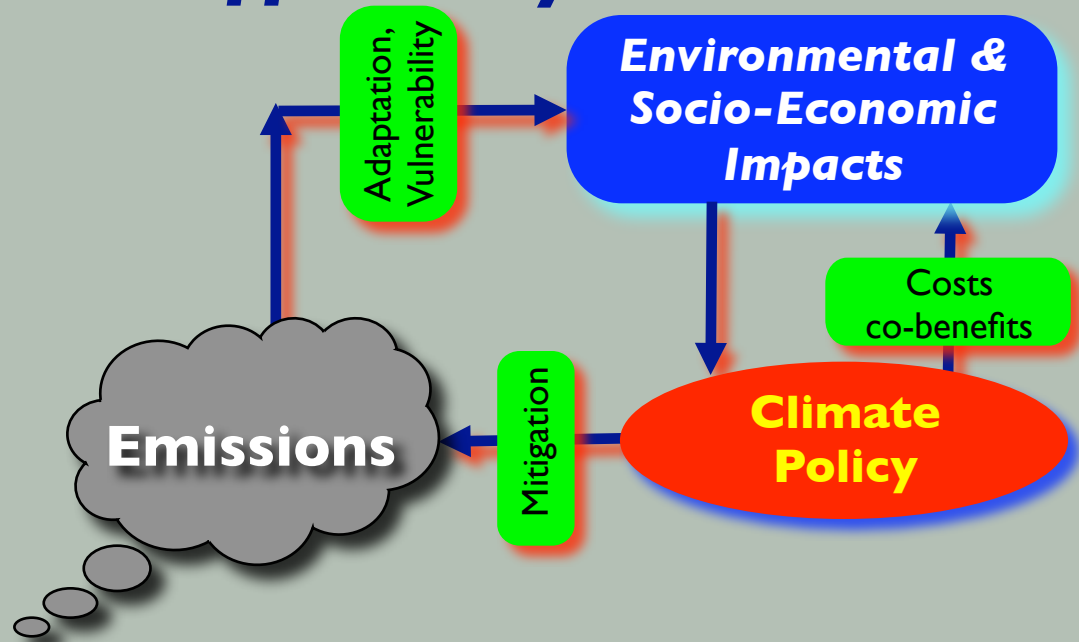
# *A Conceptual Evolution*



# A Conceptual Evolution

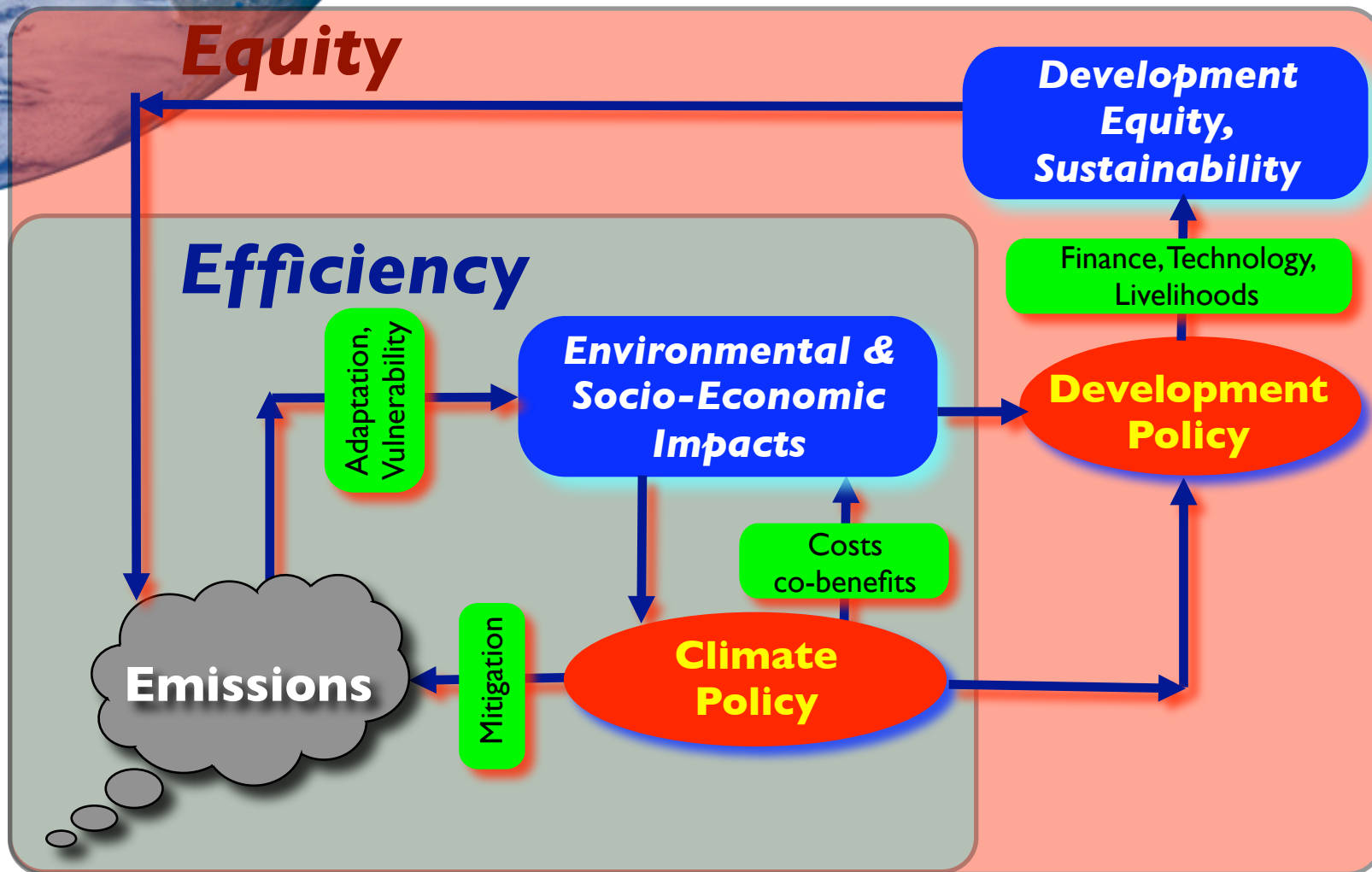
**Equity**

**Efficiency**

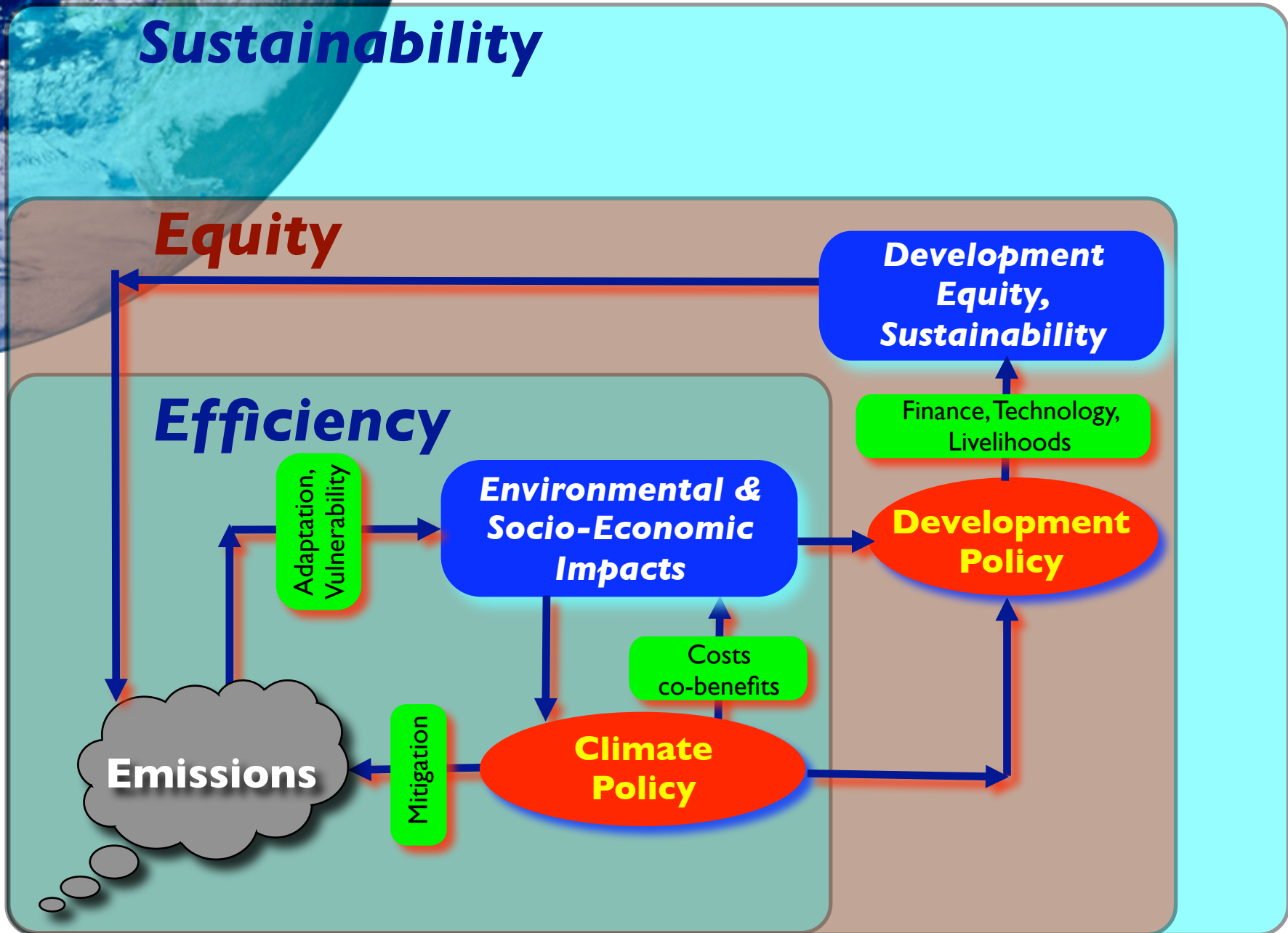




# A Conceptual Evolution

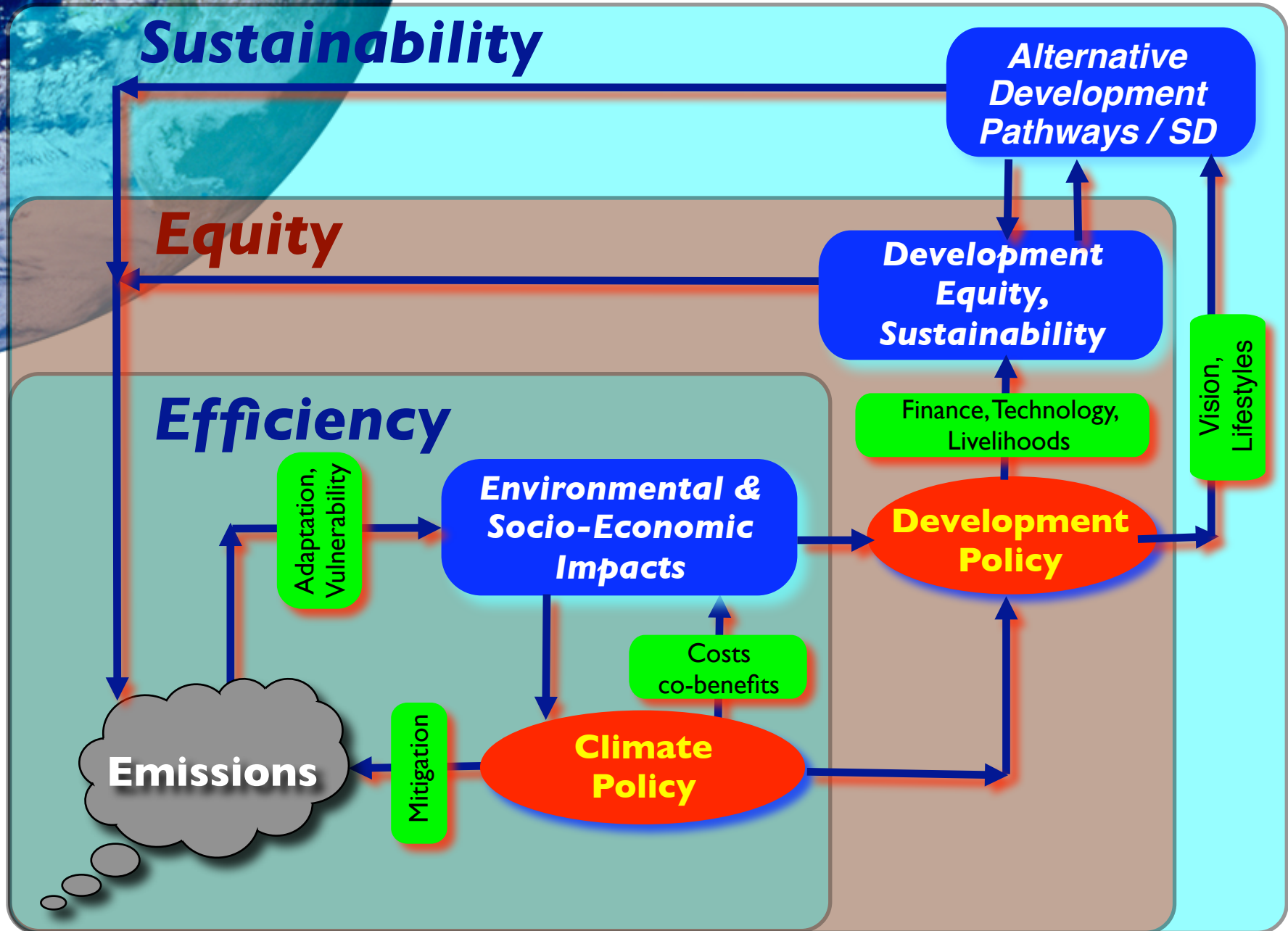


# A Conceptual Evolution





# A Conceptual Evolution

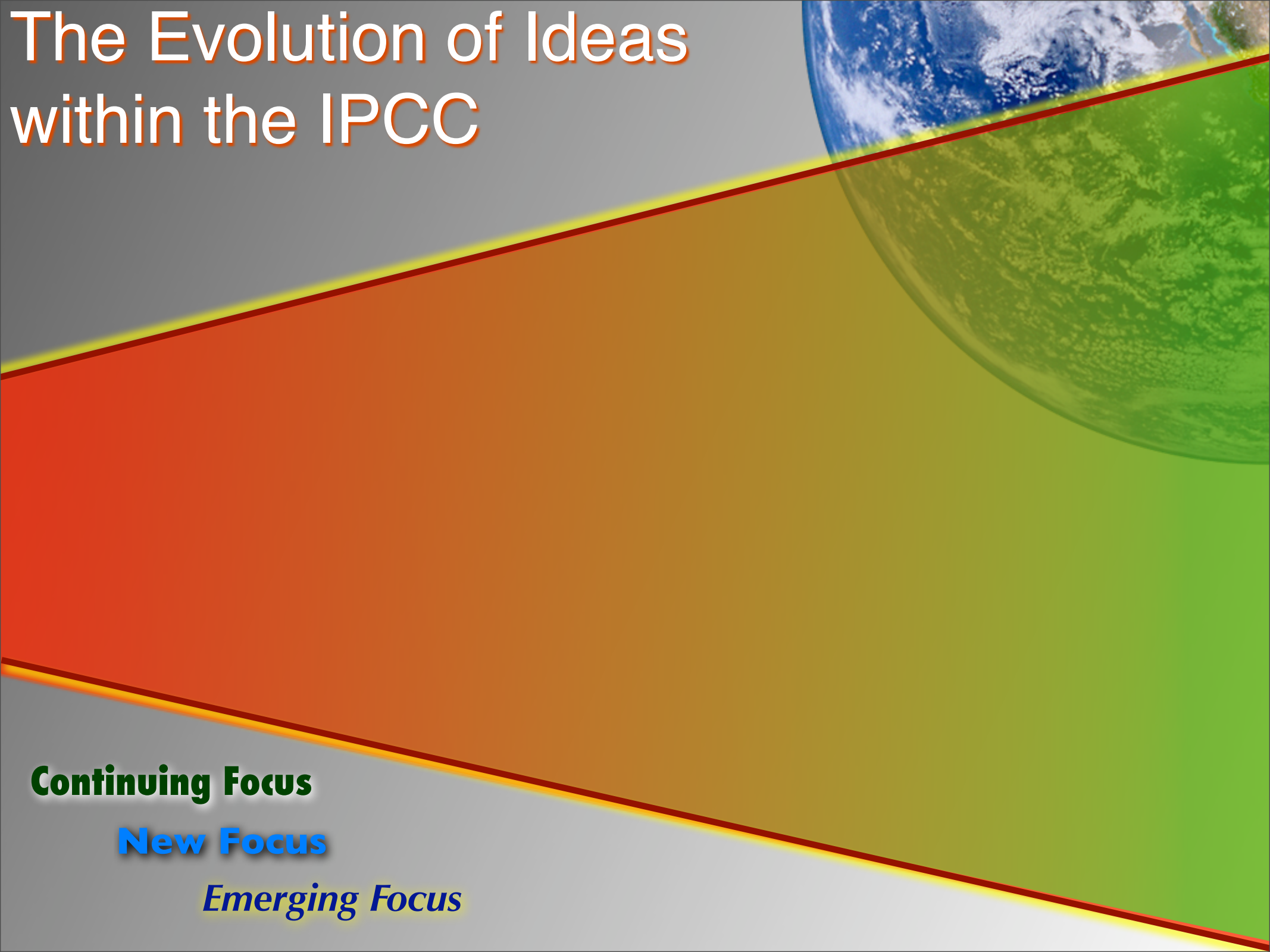








# The Evolution of Ideas within the IPCC



**Continuing Focus**

**New Focus**

*Emerging Focus*



# The Evolution of Ideas within the IPCC

IPCC First  
Assessment  
Report

**Climate +  
Impacts**

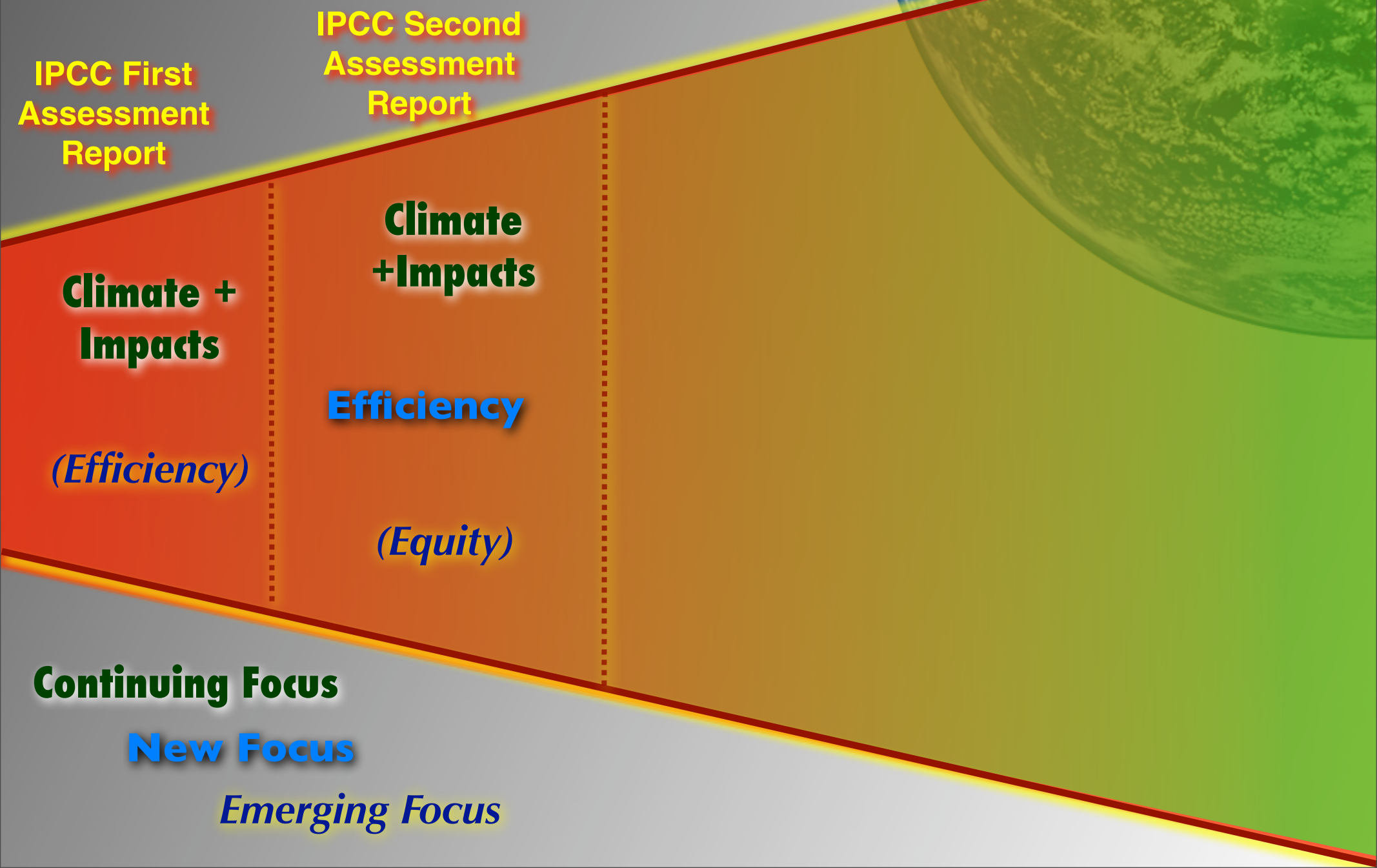
*(Efficiency)*

**Continuing Focus**

**New Focus**

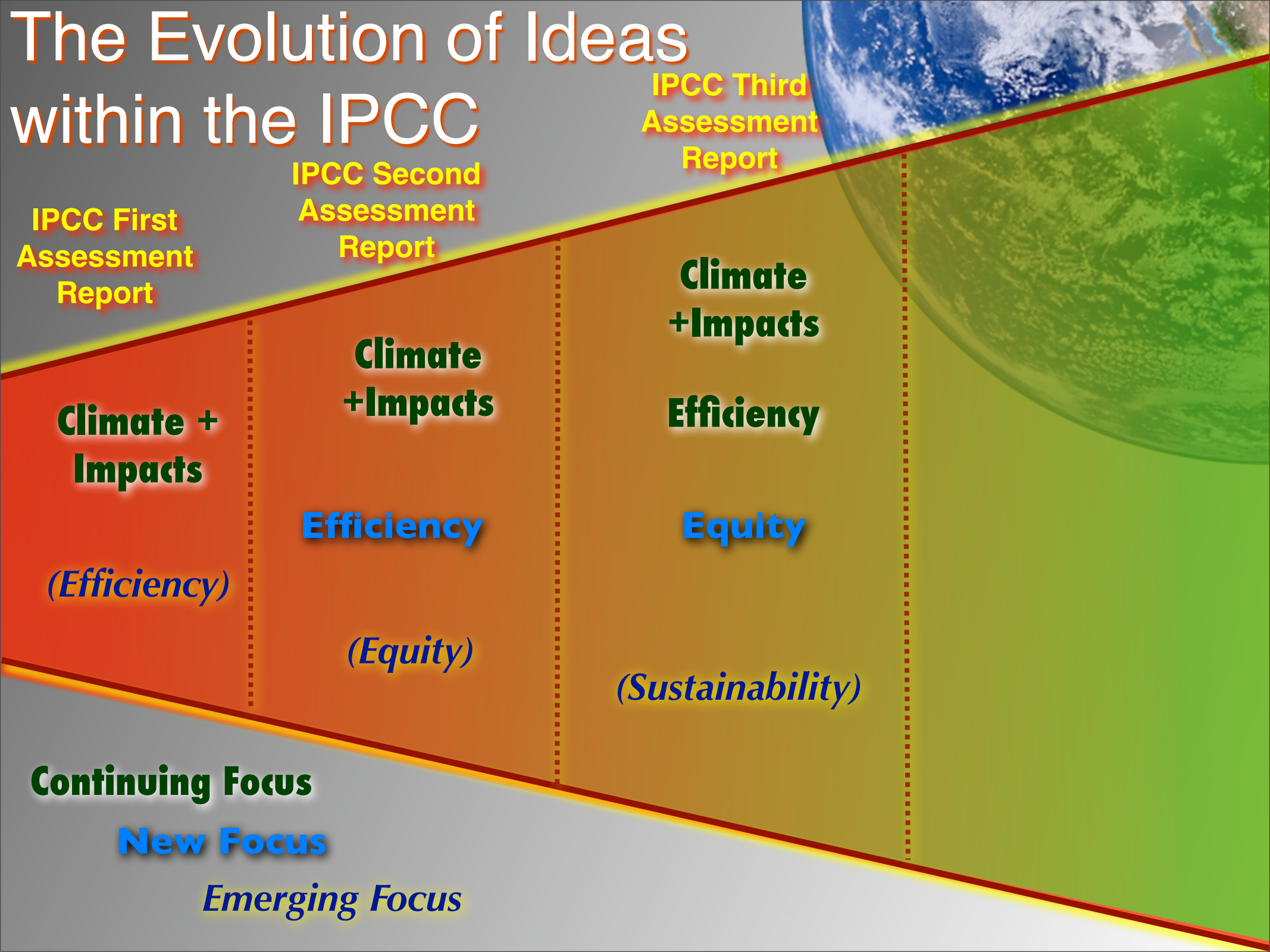
*Emerging Focus*

# The Evolution of Ideas within the IPCC

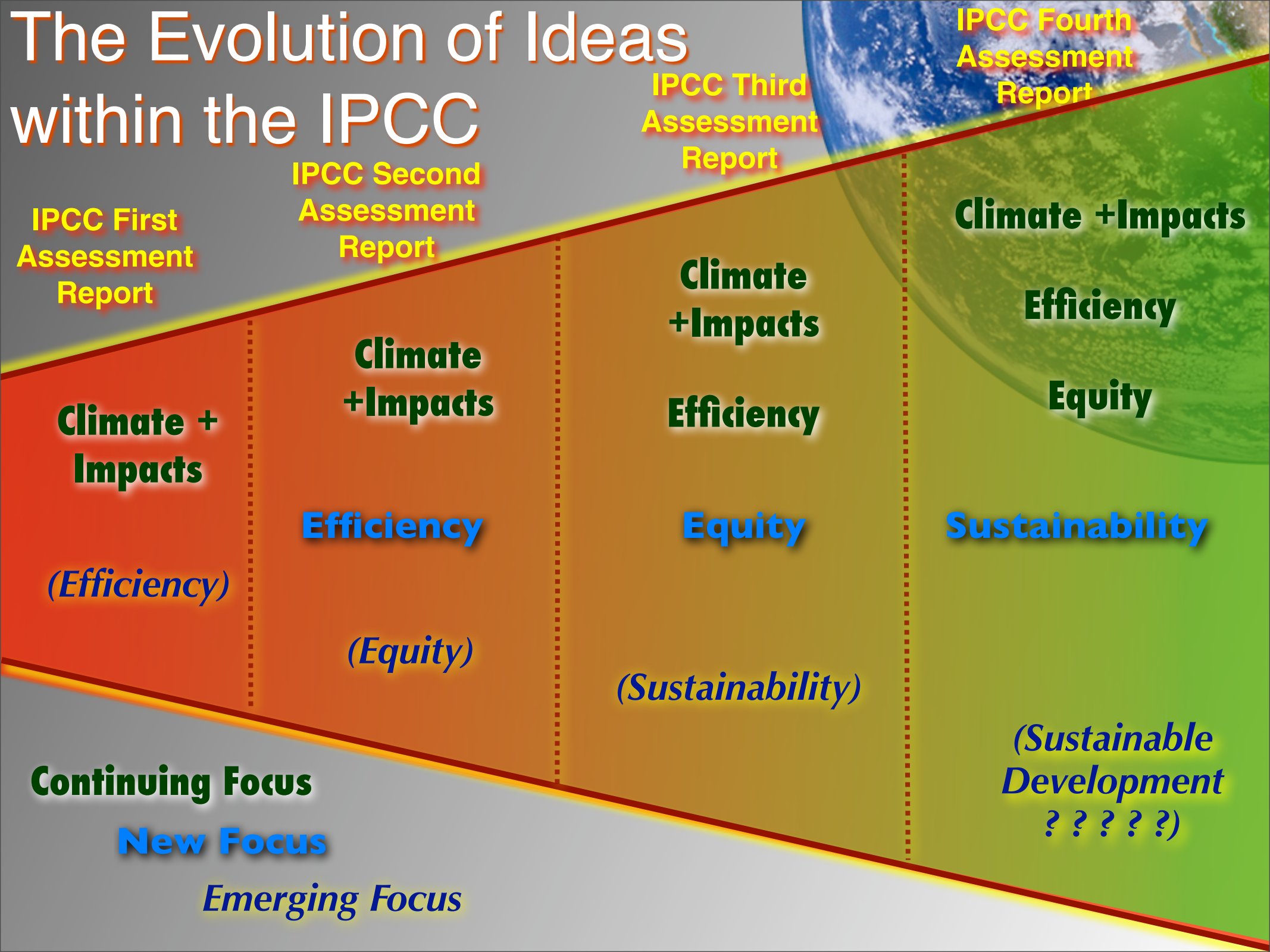




# The Evolution of Ideas within the IPCC



# The Evolution of Ideas within the IPCC













A dark blue background with a silhouette of a world map formed by scattered white rice grains. The text 'SUSTAINABLE DEVELOPMENT' is overlaid in large, bold, white capital letters across the center of the map.

# SUSTAINABLE DEVELOPMENT



# HUMAN DEVELOPMENT



# HUMAN SECURITY







*What makes  
us insecure?*

A dramatic, low-key photograph of a person in profile, looking upwards with their hands raised in a gesture of prayer or supplication. The lighting is very dark, highlighting the contours of the face and the texture of the hands against a black background. The overall mood is contemplative and spiritual.

*What makes  
us insecure?*





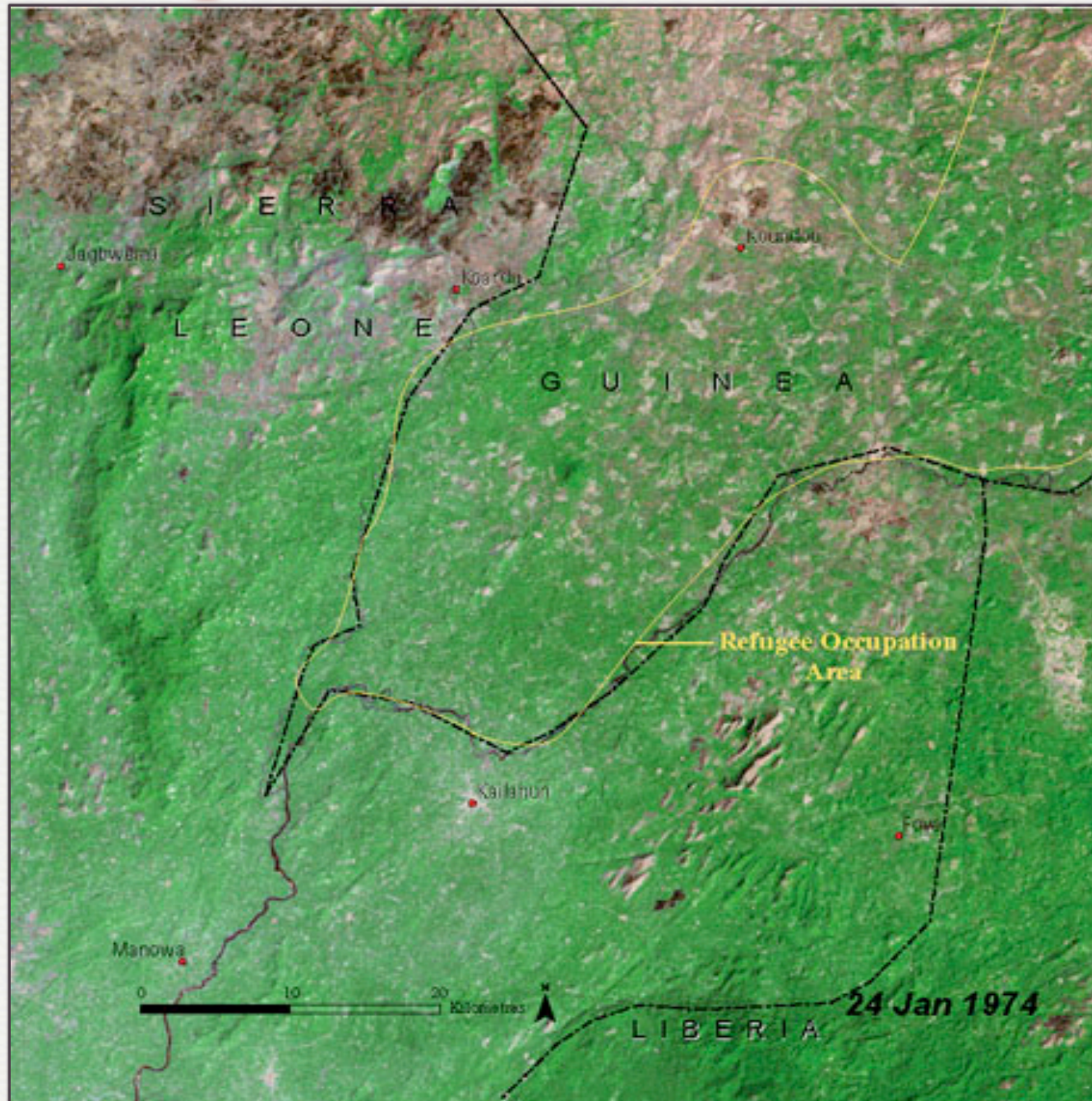


# Insecurity Impacts the Environment





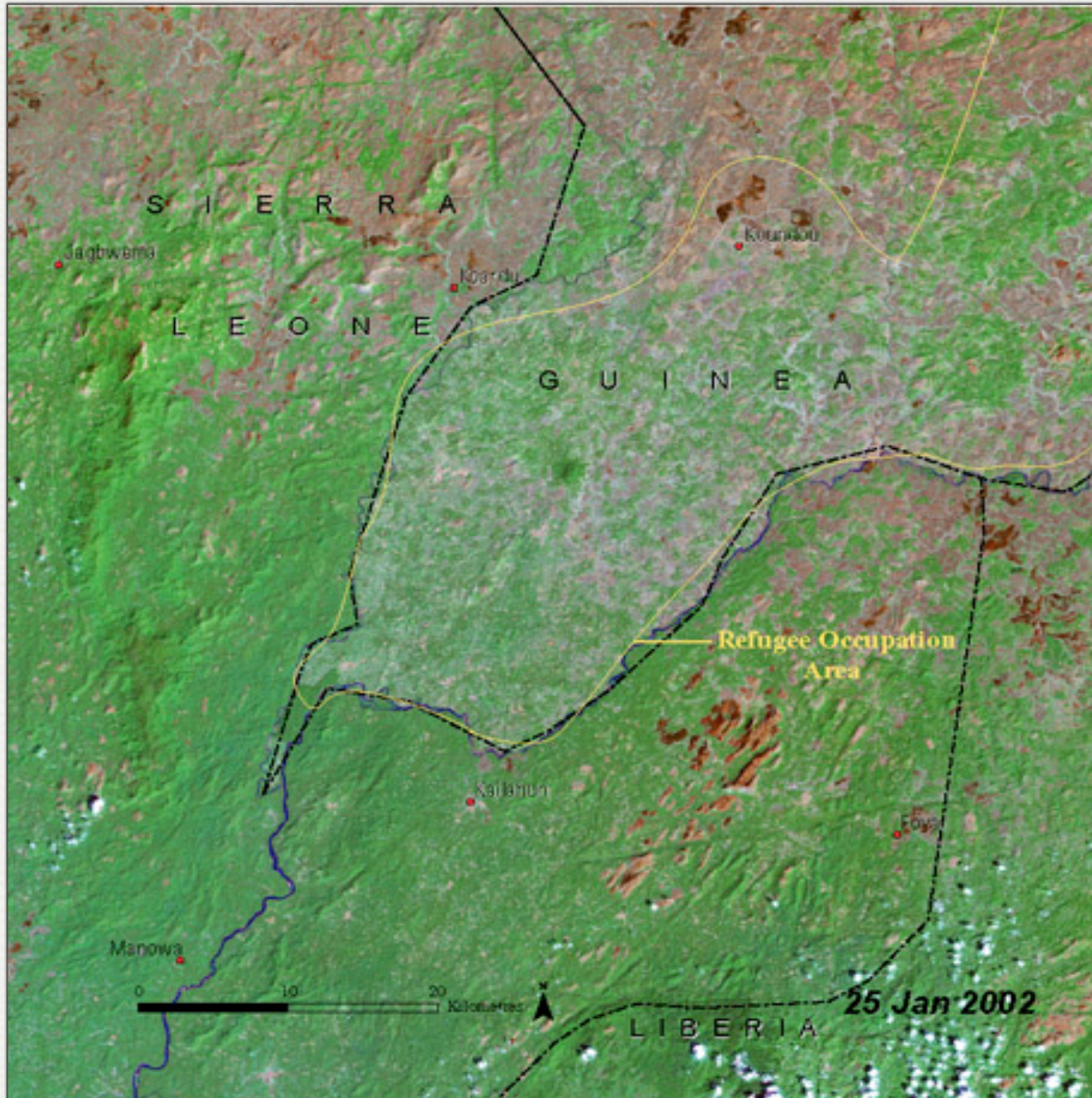
# Impact of Liberian Civil War on Guinea



**1974:  
Parrot's  
Beak  
Region,  
Guinea**



# Impact of Liberian Civil War on Guinea



**2002:**  
**Light Green**  
**Deforestation**  
**in Refugee**  
**Camps**





# Organizing Insecurities





# Organizing Insecurities



**Violent  
Conflict**

**Sources of Insecurity**

**Social  
Disruption**

# Organizing Insecurities





# Organizing Insecurities



# Organizing Insecurities





# Organizing Insecurities

State-Centered

**INTERSTATE WAR**



**INSTITUTIONAL FAILURE**



Focus of Analysis

Society-Centered

**CIVIL STRIFE**



Violent Conflict

Sources of Insecurity

Social Disruption



# Organizing Insecurities

State-Centered

**INTERSTATE WAR**



**INSTITUTIONAL FAILURE**



Focus of Analysis

Society-Centered

**CIVIL STRIFE**



**HUMAN INSECURITY**



Violent Conflict

Sources of Insecurity

Social Disruption

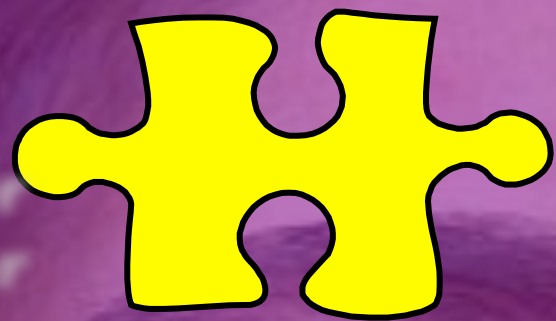




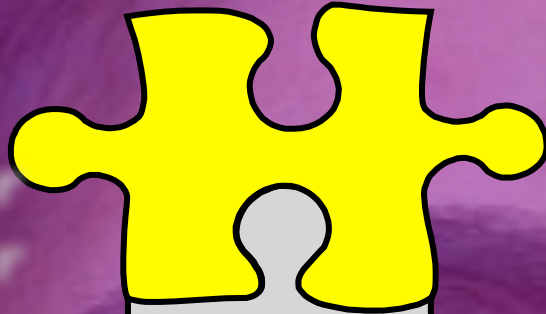




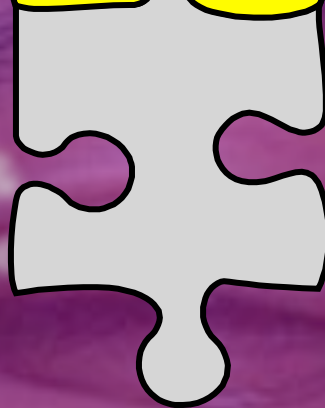
**Water  
& War**



**Water  
& War**



**Water &  
Civil Violence**





**Water &  
Institutional  
Failure**

**Water  
& War**

**Water &  
Civil Violence**

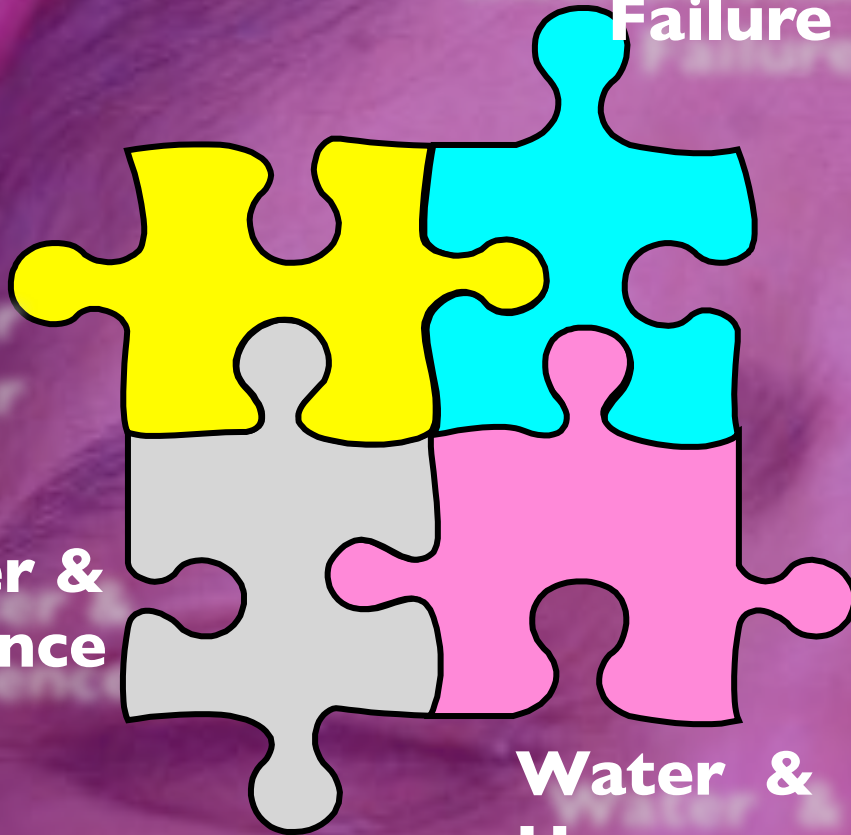


**Water &  
Institutional  
Failure**

**Water  
& War**

**Water &  
Civil Violence**

**Water &  
Human  
Insecurity**





**Water wars  
have been  
few, remain  
unlikely,  
but water  
woes can  
exacerbate  
existing  
tensions**

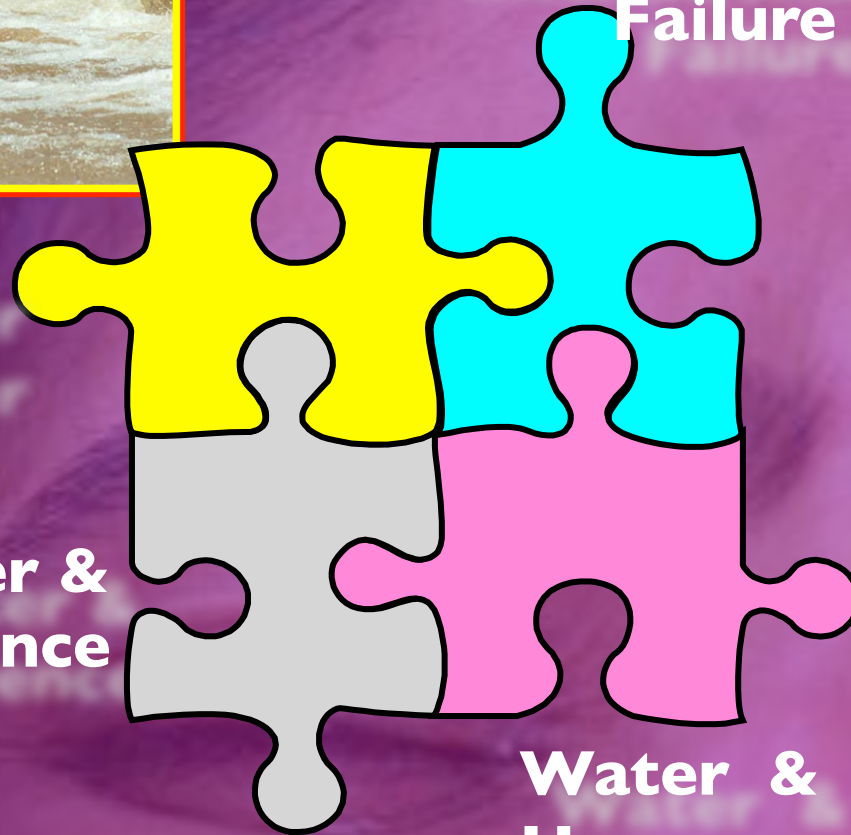


**Water &  
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**Water &  
Institutional  
Failure**

**Water  
& War**

**Water &  
Civil Violence**

**Water &  
Human  
Insecurity**



**Water triggers  
human insecurity  
through livelihoods  
as well as lifestyles**



**Water wars have been few, remain unlikely, but water woes can exacerbate existing tensions**



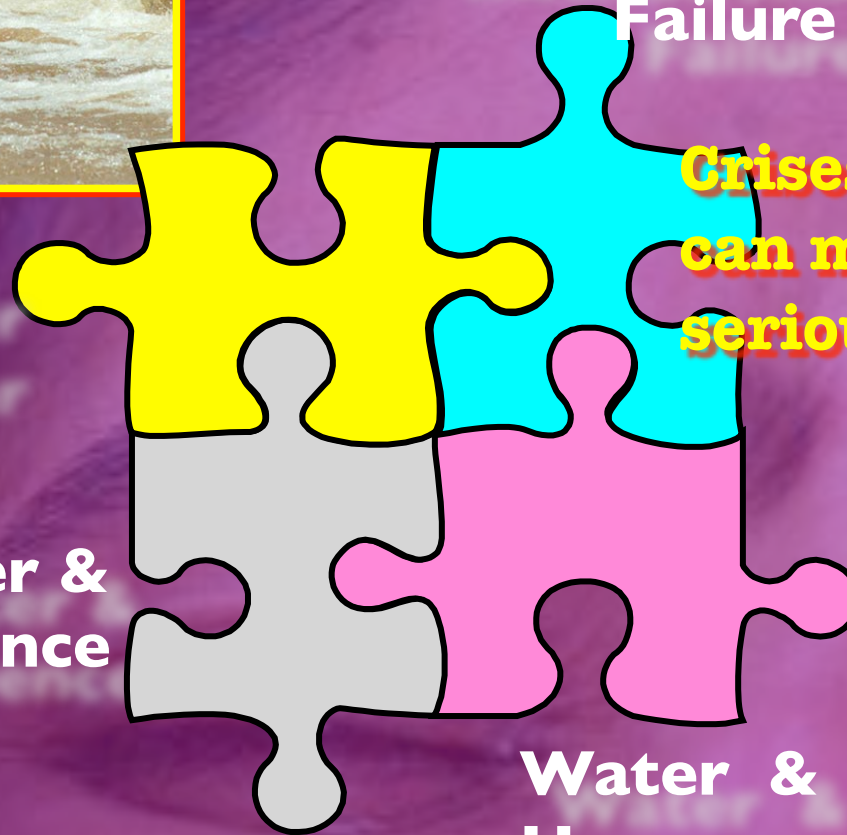
**Water & War**

**Water & Civil Violence**

**Water & Institutional Failure**



**Crises of governance can manifest as serious social conflict**



**Water & Human Insecurity**



**Water triggers human insecurity through livelihoods as well as lifestyles**



**Water wars have been few, remain unlikely, but water woes can exacerbate existing tensions**



**Water & War**

**Water & Institutional Failure**



**Crises of governance can manifest as serious social conflict**



**Water & Civil Violence**

**Water remains a major cause of (sometimes fatal) civil violence**



**Water & Human Insecurity**



**Water triggers human insecurity through livelihoods as well as lifestyles**





# Thinking Climate & Security



# Thinking Climate & Security



# Thinking Climate & Security

**Climate &  
Interstate  
War**



**Climate &  
Institutional  
Failure**



**Climate  
& Civil  
Violence**



**Climate &  
Human  
Insecurity**





# Thinking Climate & Security

*Unlikely!*

**Climate & Interstate War**



**Climate & Institutional Failure**



**Climate & Civil Violence**



**Climate & Human Insecurity**



# Thinking Climate & Security

**Climate &  
Interstate  
War**

*Unlikely!*



**Climate &  
Institutional  
Failure**



**Climate  
& Civil  
Violence**

*Coming  
Soon!*



**Climate &  
Human  
Insecurity**





# Thinking Climate & Security

Climate &  
Interstate  
War

Unlikely!



Climate &  
Institutional  
Failure

Trigger!



Climate  
& Civil  
Violence

Coming  
Soon!



Climate &  
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# Thinking Climate & Security

Climate &  
Interstate  
War

Unlikely!



Climate &  
Institutional  
Failure

Trigger!



Climate  
& Civil  
Violence

Coming  
Soon!



Climate &  
Human  
Insecurity

Here!  
Now!







**MITIGATION  
ADAPTATION**



# MITIGATION ADAPTATION

*Which should be our priority?*

# MITIGATION ADAPTATION

*Which should be our priority?*

**WRONG  
QUESTION!**



# MITIGATION ADAPTATION

*Which should be our priority?*

*Key Proposition:*

*The necessity of Adaptation arises  
because of the failure to Mitigate.*

# MITIGATION ADAPTATION

*Which should be our priority?*

*The less (someone) mitigates today,  
the more we will have to adapt  
tomorrow.*



# MITIGATION ADAPTATION

*Which should be our priority?*

*Mitigation usually requires (large)  
Capital costs (one time); Adaptation  
usually requires (large) recurring costs.*

# MITIGATION ADAPTATION

*Which should be our priority?*

*Both Mitigation and Adaptation are now  
Development necessities; Both can - and  
should - be seen as development  
opportunities.*



# MITIGATION ADAPTATION

*Which should be our priority?*

*Both Mitigation and Adaptation need to be contextualized within our own (sustainable) development needs.*

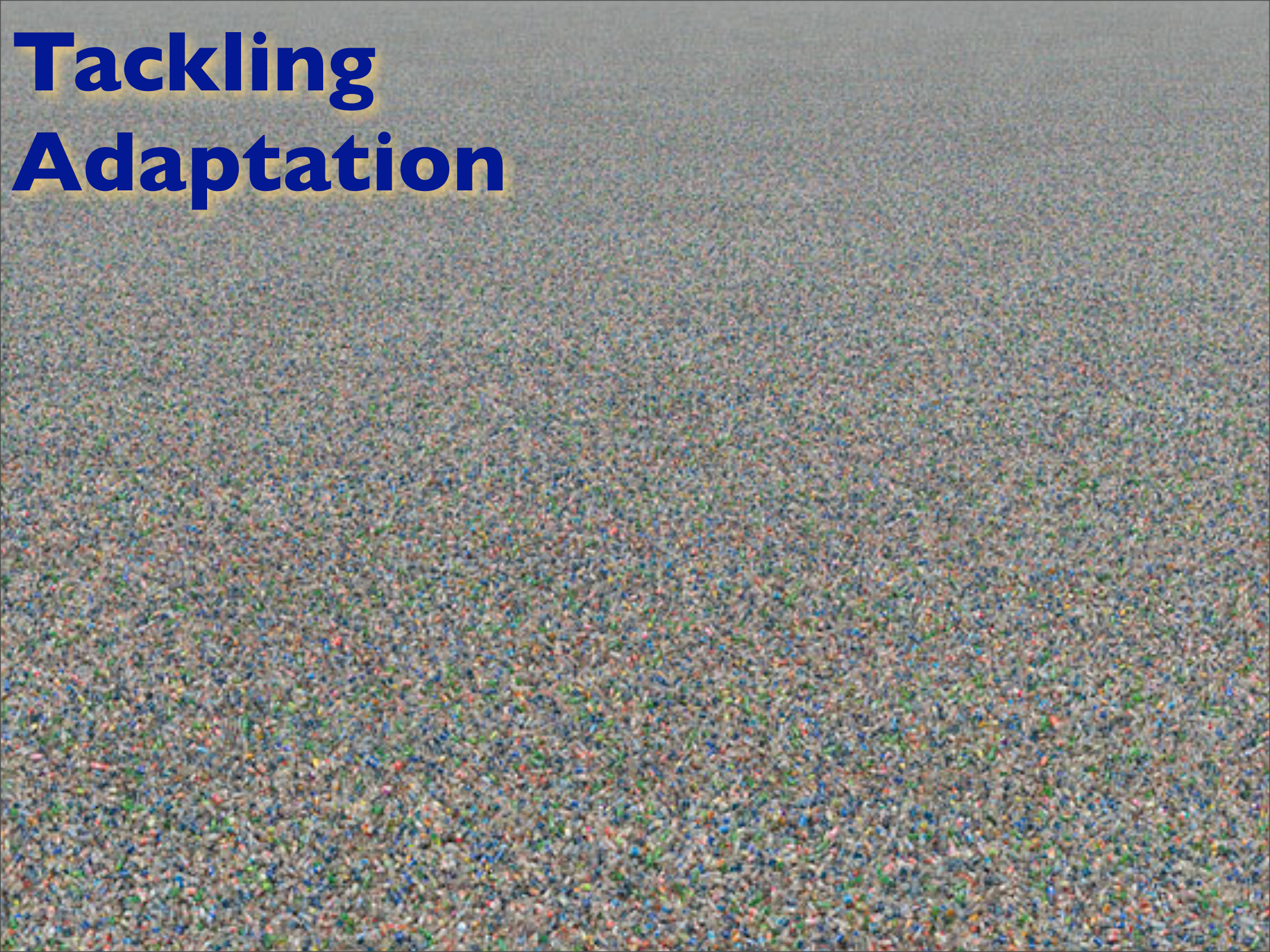








# Tackling Adaptation





# Tackling Adaptation

*First, get  
closer to  
the problem!*





# Tackling Adaptation

*First, get  
closer to  
the problem!*



Depicts 2 million plastic beverage bottles;  
number used in the US every 5 minutes.



# **Tackling Adaptation**

***First, get  
closer to  
the problem!***

***Viewed close up,  
Adaptation is Development***







# Tackling Adaptation





# Tackling Adaptation

*Problem of  
Ignorance*





# Tackling Adaptation

*Problem of  
Currency*





# **Tackling Adaptation**

*Problem of  
Political Will*





# Tackling Adaptation



**TIME**  
"A BUOYANT HYMN TO LIFE  
AND A MOVIE TO CELEBRATE."  
RICHARD CORLISS

WHAT DOES IT TAKE TO FIND A LOST LOVE?

A. MONEY

B. LUCK

C. SMARTS

D. DESTINY

A DANNY BOYLE FILM  
**slumdog millionai**

**RESILIENCE**

(ADAPTIVE CAPACITY)



# Tackling Adaptation



**INFRASTRUCTURE**  
(INVESTMENT)

**RESILIENCE**  
(ADAPTIVE CAPACITY)



# Tackling Adaptation



**LIVELIHOODS**  
(DEVELOPMENT)

**INFRASTRUCTURE**  
(INVESTMENT)

**RESILIENCE**  
(ADAPTIVE CAPACITY)



# Tackling Adaptation

**PORTFOLIO  
(POLICY)**

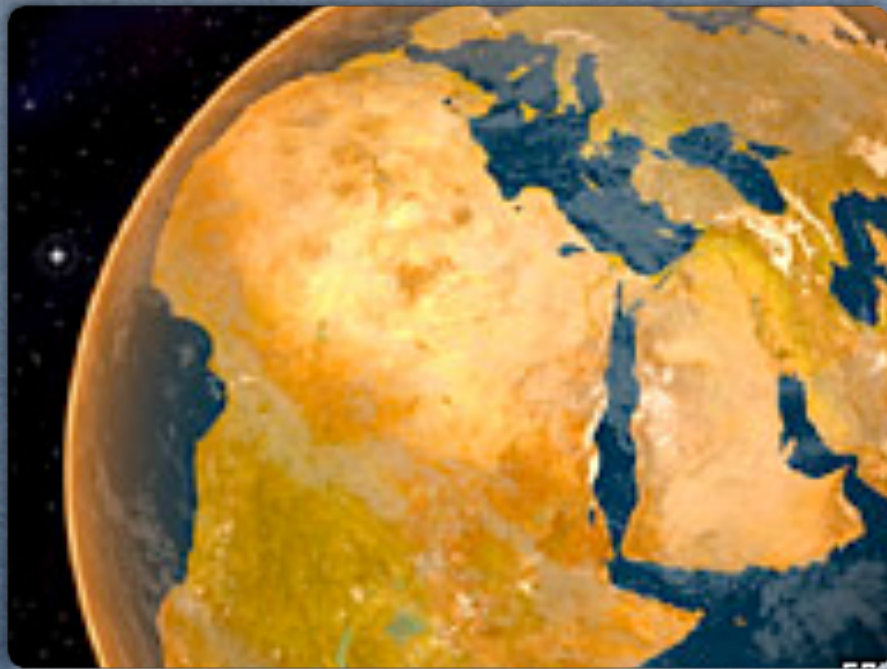
**LIVELIHOODS  
(DEVELOPMENT)**

**INFRASTRUCTURE  
(INVESTMENT)**

**RESILIENCE  
(ADAPTIVE CAPACITY)**

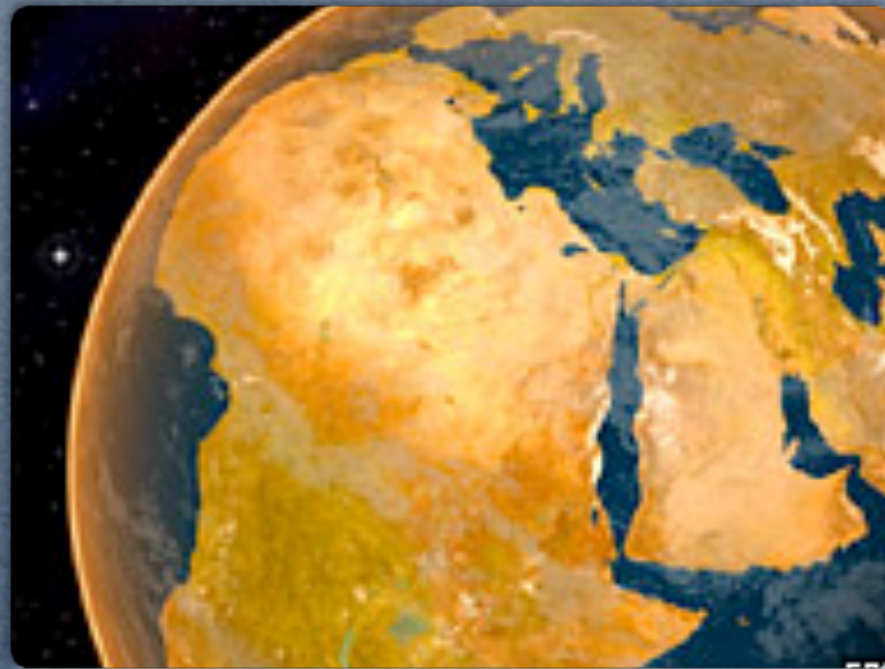








# 6 Propositions



What factors will define the future climate for development?





# Proposition #1:

*The climate problematic simply cannot be tackled by environment policy alone.*





# Proposition #1:

*The climate problematic simply cannot be tackled by environment policy alone.*

*The environment is “where” development takes place. It constrains both the “inputs” and the “outputs” of the development process.*



# Proposition #1:

*The climate problematique simply cannot be tackled by environment policy alone.*

*The IPCC in general, and its SRES report in particular, have demonstrated the necessity of looking beyond climate policy alone; especially for the South.*



# Proposition #1:

*The climate problematique simply cannot be tackled by environment policy alone.*

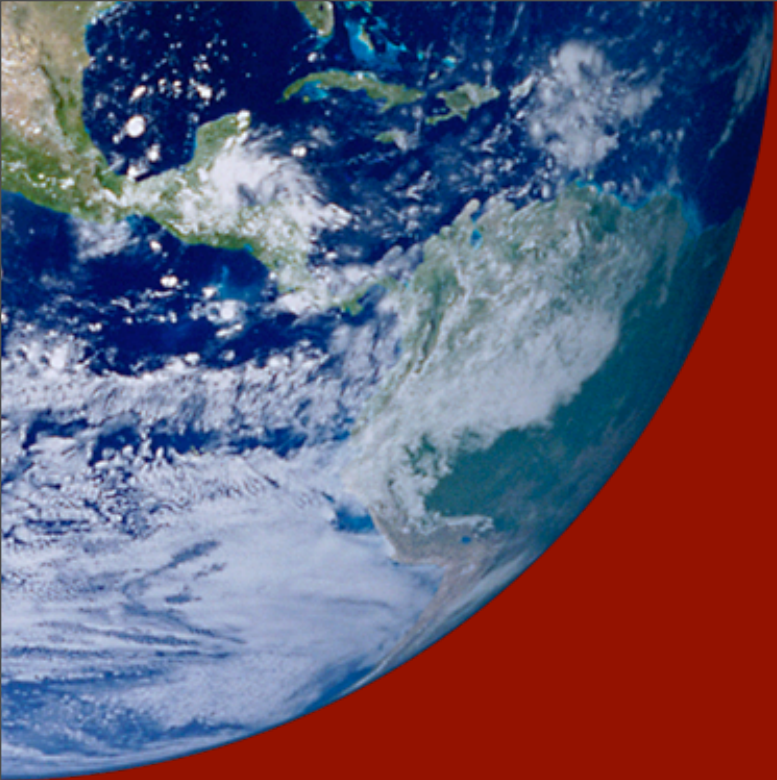
*The challenge of climate policy is not one of “minimizing costs” it is one of “allocating” costs and “maximizing” benefits.*

# Proposition #1:

*The climate problematique simply cannot be tackled by environment policy alone.*

*Climate policy is already triggering a massive “investment shift” (not the same as “costs”)*







# Proposition #2:

*There is a new energy economy in the making and it will not be stopped.*



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*There is a new energy economy in the making and it will not be stopped.*



*Climate is not the only driver of this change. But it will be an increasingly important driver.*

# Proposition #2:

*There is a new energy economy in the making and it will not be stopped.*



*The change in the energy economy is demand driven, but the demand will be increasingly climate constrained.*



# Proposition #2:

*There is a new energy economy in the making and it will not be stopped.*



*The shifts we are already seeing in the sector are systemic and potentially threatening, but they also offer development gains.*







# Proposition #3:





# Proposition #3:

*Climate change will hit the poorest first, will hit the poorest most, and will hit the poorest disproportionately.*



# Proposition #3:

*Climate change will hit the poorest first, will hit the poorest most, and will hit the poorest disproportionately.*

*The poor are the most vulnerable and least resilient to Climate Change..*



# Proposition #3:

*Climate change will hit the poorest first, will hit the poorest most, and will hit the poorest disproportionately.*

*Some of the poorest countries and the poorest communities within them are most at threat.*



# Proposition #3:

*Climate change will hit the poorest first, will hit the poorest most, and will hit the poorest disproportionately.*

*For many of these poorest communities climate change is no longer a “future” issue.*



# Proposition #3:

*Climate change will hit the poorest first, will hit the poorest most, and will hit the poorest disproportionately.*

*Adaptation is where much of this will play out, and adaptation is development.*









# Proposition #4:



# Proposition #4:

*Internationally, the politics of climate will remain fractured*





# Proposition #4:

*Internationally, the politics of climate will remain fractured*





**We need to start  
some conversations**



**Fulfill Kyoto  
Commitments**





# We need to start some conversations



**-Meet Annex 1  
Emission targets**

**Fulfill Kyoto  
Commitments**



# **We need to start some conversations**



**-Meet Annex 1  
Emission targets**

**Fulfill Kyoto  
Commitments**

**-Tech Transfer &  
Other Commitments**



# **We need to start some conversations**

**Broad  
Participation**

**-Meet Annex 1  
Emission targets**

**Fulfill Kyoto  
Commitments**

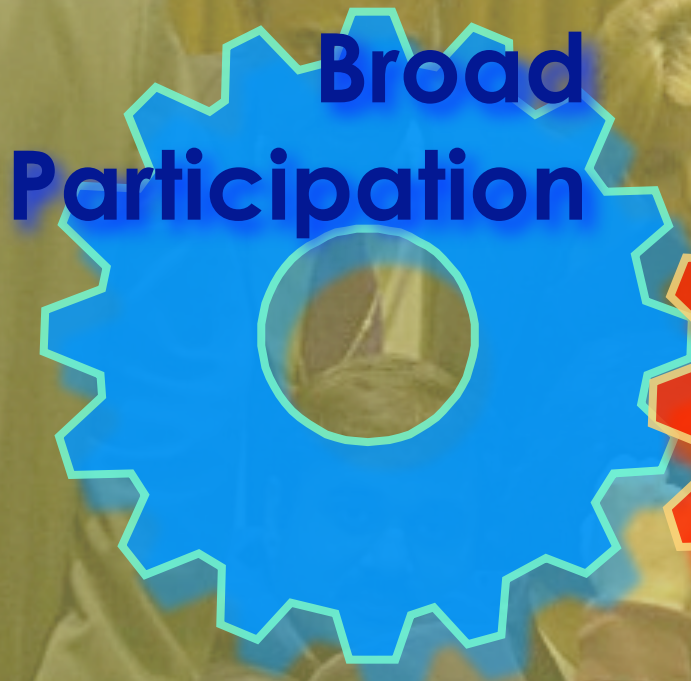
**-Tech Transfer &  
Other Commitments**





# **We need to start some conversations**

**-Define multiple forms of  
participation**



**-Meet Annex 1  
Emission targets**

**Fulfill Kyoto  
Commitments**

**-Tech Transfer &  
Other Commitments**



# We need to start some conversations

**-Define multiple forms of participation**

**-Adaptation is Key**

**Broad Participation**

**-Meet Annex 1 Emission targets**

**Fulfill Kyoto Commitments**

**-Tech Transfer & Other Commitments**





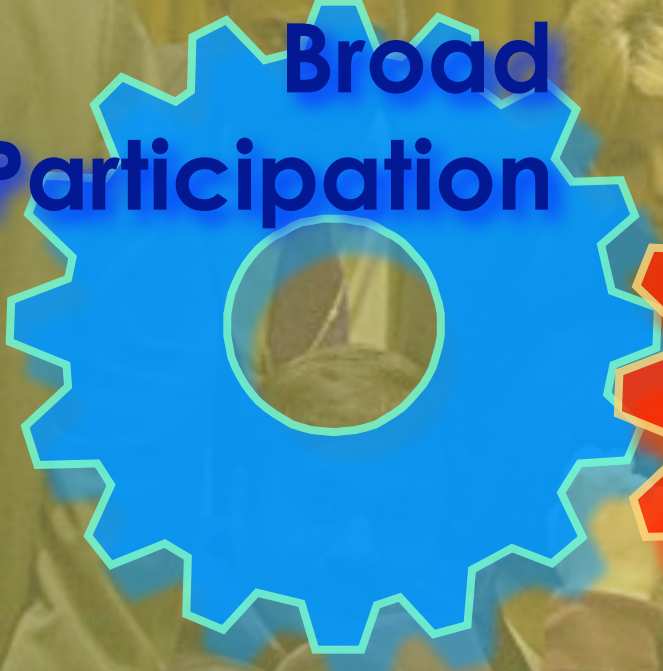
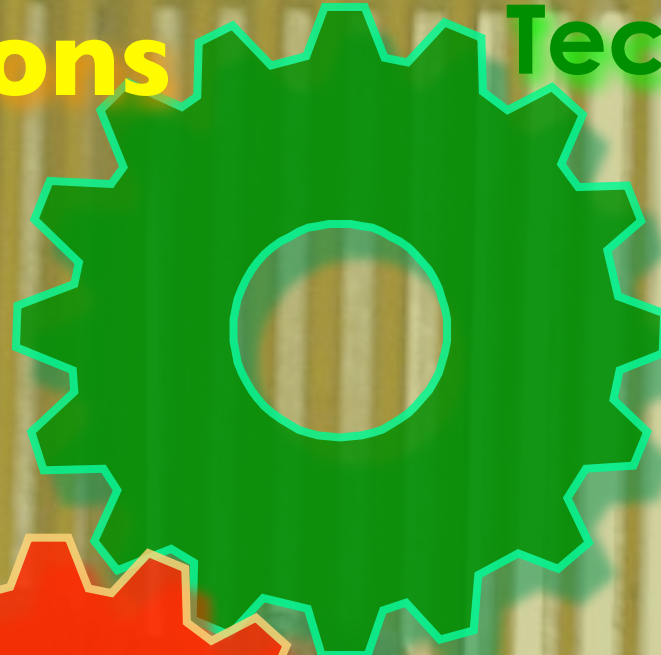
**We need to start  
some conversations**

**Decarbonization  
Technologies**

**-Define multiple forms of  
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**-Adaptation is Key**

**Broad  
Participation**



**-Meet Annex 1  
Emission targets**

**Fulfill Kyoto  
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**-Tech Transfer &  
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**We need to start  
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**Decarbonization  
Technologies**

**-Define multiple forms of  
participation**

**-Adaptation is Key**

**Broad  
Participation**

**-Address  
Capacity  
Constraints**

**-Meet Annex 1  
Emission targets**

**Fulfill Kyoto  
Commitments**

**-Tech Transfer &  
Other Commitments**





**We need to start  
some conversations**

**Decarbonization  
Technologies**

**-Define multiple forms of  
participation**

**-Adaptation is Key**

**Broad  
Participation**

**-Address  
Capacity  
Constraints**

**-Encourage  
Technological  
Leapfrogging**

**-Meet Annex 1  
Emission targets**

**Fulfill Kyoto  
Commitments**

**-Tech Transfer &  
Other Commitments**





# We need to start some conversations

# Decarbonization Technologies

**-Define multiple forms of participation**

**-Adaptation is Key**

**Broad Participation**

**-Meet Annex 1 Emission targets**

**Fulfill Kyoto Commitments**

**-Tech Transfer & Other Commitments**

**-Address Capacity Constraints**

**-Encourage Technological Leapfrogging**

**-Remove Institutional Barriers**





**We need to start  
some conversations**

**Decarbonization  
Technologies**

**Broad  
Participation**

**Fulfill Kyoto  
Commitments**

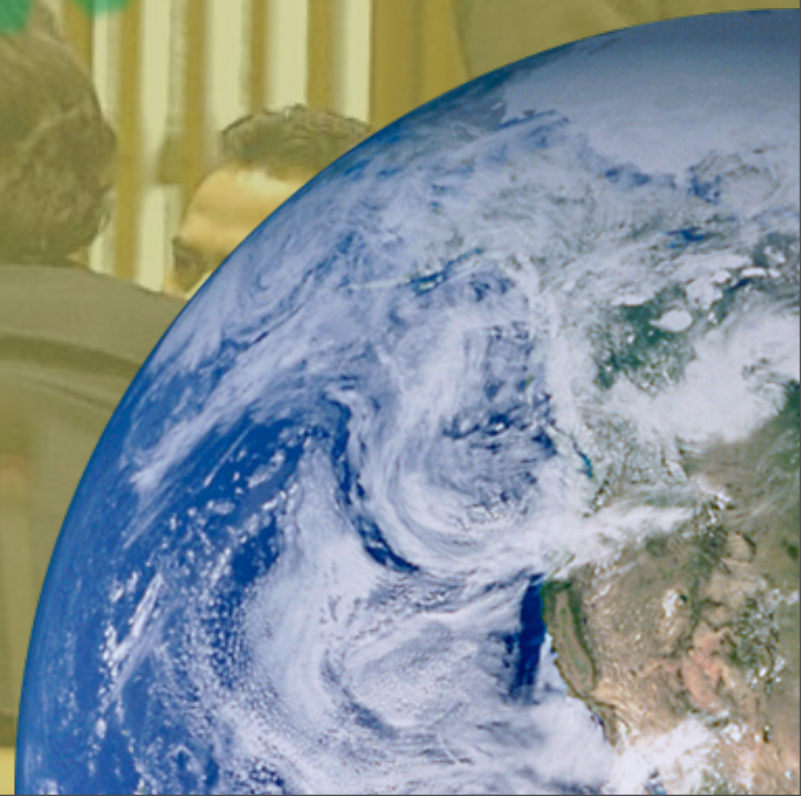
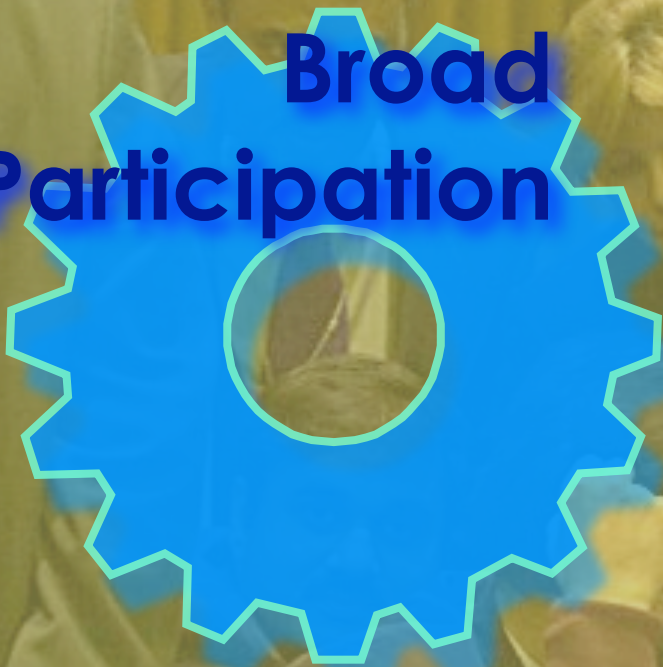
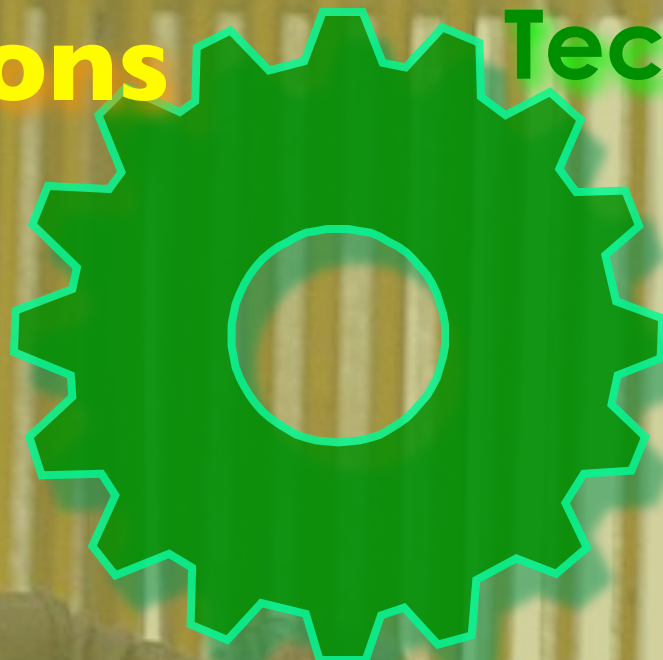




**We need to start  
some conversations**

**Decarbonization  
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**Broad  
Participation**





**We need to start  
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**Decarbonization  
Technologies**

**Broad  
Participation**

**Fulfill Kyoto  
Commitments**





**We need to start  
some conversations**

**Decarbonization  
Technologies**

**Broad  
Participation**

**Climate First**

**Fulfill Kyoto  
Commitments**

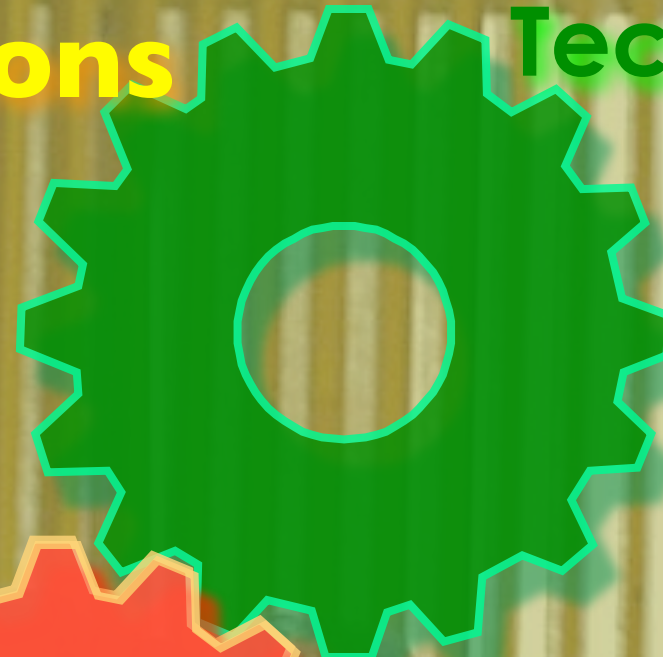




**We need to start  
some conversations**

**Decarbonization  
Technologies**

**Broad  
Participation**



**Development  
First**



**Climate First**

**Fulfill Kyoto  
Commitments**





**We need to start  
some conversations**

**Decarbonization  
Technologies**

**Both  
Together**

**Broad  
Participation**

**Development  
First**

**Climate First**

**Fulfill Kyoto  
Commitments**







# Proposition #5:

*We will need much better policy coherence.*





# Proposition #5:

*We will need much better policy coherence.*

*Environment is too important to be left to environmentalists alone.*





# Proposition #5:

*We will need much better policy coherence.*

*Development decision-makers will need to take center-stake, especially in the South.*





# Proposition #5:

*We will need much better policy coherence.*

*Coherence at the domestic level is even more important than internationally.*





# Proposition #6:







# Proposition #6:

*Climate Policy was  
predominantly  
Energy Policy;  
Increasingly, it will  
become Water Policy*





# Proposition #6:

*Climate Policy was  
predominantly  
Energy Policy;  
Increasingly, it will  
become Water Policy*

*Climate Mitigation is  
and will remain a  
predominantly 'Energy  
Game'*





# Proposition #6:

*Climate Policy was  
predominantly  
Energy Policy;  
Increasingly, it will  
become Water Policy*

*Climate Adaptation will  
increasingly be a 'Water  
Game', but not just that*





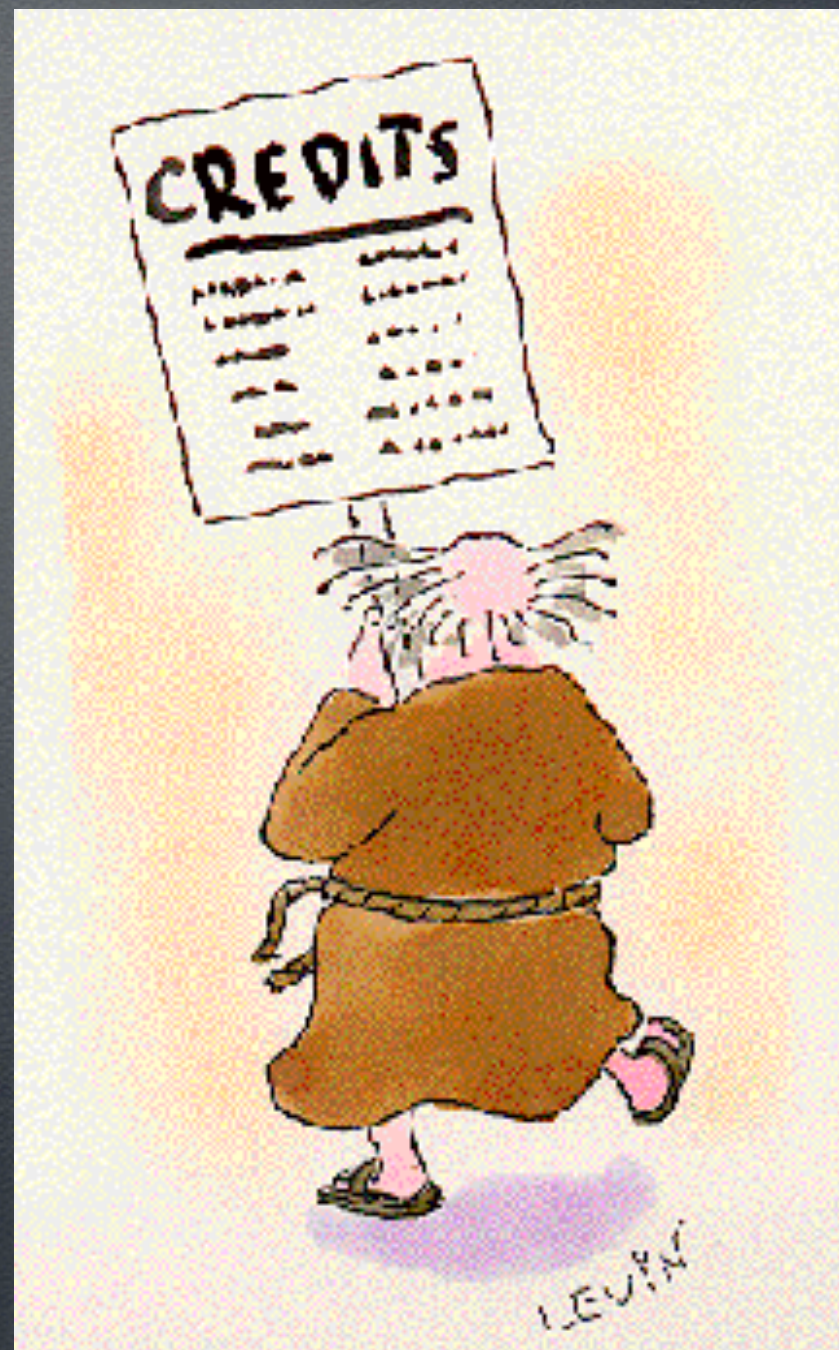
# Proposition #6:

*Climate Policy was  
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LEVIN