Global Warming Trend "Unmistakable," UN Says



Smoke from a bushfire billows over beach-goers at Carlton, about 20 kilometers (12 miles) east of Hobart, Australia, January 4, 2013.

SYDNEY - The United Nations' chief science body is meeting in Tasmania as climate scientists urge Australia to prepare for rising sea levels that could put about \$300 billion worth of commercial property, infrastructure, and homes at risk. The UN Intergovernmental Panel on Climate Change summit in Hobart is the latest round of talks before the release of its fifth major paper in September.

The Intergovernmental Panel on Climate Change insists its methods are both vigorous and reliable. The United Nations' main climate agency says the global warming trend is "unmistakable," and it is defending the science behind its assertion.

More than 250 scientists who will contribute to the September report have promised to deliver "scientifically defensible" conclusions when the study is released.

Global Warming Trend

The IPCC meets as Australia confronts a record-breaking heat wave that has sparked widespread wildfires across the country's southeast.

IPCC chairman Rajendra Pachauri has no doubt that the extreme heat is part of a global warming trend.

Pachauri hopes that the international community will rally behind the issue of climate change as it did with previous global efforts designed to stop the depletion of the ozone layer.

"Yes, I am concerned no doubt, but I also have a high opinion of human wisdom that I think, at some stage, we will bring about change," Pachauri said. "I mean, the world did act on the Montreal Protocol, the whole problem of depletion of the ozone layer and it happened very fast. Now, I expect that perhaps this, as is the case, is going to take a little longer, but hopefully we will get action across the board."

Rising Sea Levels

Australia's government-appointed climate commission is also warning that global warming is increasing the risk of scorching heat waves becoming more frequent.

There are concerns, too, that rising sea levels could threaten the country's famous beachfront lifestyle. More than seventy-five percent of Australians live near the ocean.

But Alan Stokes, the head of the National Sea Change Taskforce, which represents many coastal councils and communities, says severe flooding in the state of Queensland two years ago has shown how vulnerable low-lying areas can be.

"People all around Australia want to live near the coast," explained Stokes. "They'd like to live as close to it as they can, but there is a risk involved, and we don't want to find ourselves in the position in the next twenty, thirty, or ninety years of facing frequent extreme flooding events such as those that we saw in Queensland, which could destroy those properties and place people in harm's way."

Climate scientists are concerned that the melting of the Greenland ice sheet could pose serious problems to vulnerable areas elsewhere, including low-lying island nations in the South Pacific that rise barely a few meters above sea level.

The leaders of Kiribati have warned that its entire population of 100,000 people could be forced to migrate if their homes are swamped by the ocean.

Climate change is an issue that divides Australia, a nation that relies on cheap supplies of coal. Although many people think that society's reliance on fossil fuels is eausing temperatures to rise, others believe that a shifting climate is simply part of a natural cycle and is not caused by man's excesses.

> By Phil Mercer, January 15, 2013 Voice of America

Words and Idioms

Vocabulary

Match each word to its definition.

- 1. climate (n)
- .
- 2. infrastructure (n) .
- 3. vigorous (adj)
- 4. reliable (adj)
- 5. assertion (n)
- 6. confront (v)
- 7. scorching (adj)
- 8. vulnerable (adj) •
- 9. frequent (adj)
- 10. migrate (v)
- 11. reliance (n)
- 12. depletion (n)
- 13. rally (v)
- 14. spark (v)
- 15. swamp (v)

- a. very hot
- . b. a definite statement or claim
- c. happening often
- d. the basic facilities, services, and installations needed for a society to function
- . e. weak; easy to hurt or to attack
- f. the type of weather that a country or region has
- · g. sound; sturdy or robust
- . h. to deal with (a difficult situation); to face
- . i. the state of being dependent on a person or thing
- . j. to move from one country or region to another
- k. able to be counted on or trusted to work or be accurate
- . I. to cover or fill with water
- . m. to ignite; to start, usually from a small source or cause
- n. to join in support of
- o. reduction in the amount of something due to overuse or damage

Idioms and Expressions

Fill in the blanks with the correct idioms and expressions from the box.

20000

round of talks: a series of conversations usually focused on trying to resolve an issue or problem

They were unable to come to an agreement after the first round of talks.

record-breaking: beating the previous record

His record-breaking performance was three minutes faster than the previous record.

across the board: completely; totally; comprehensively; equally for everyone.

The government is lowering taxes across the board.

The government is le	owering taxes	across the	board
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1.	Will the school cut its budget _	, or only in some areas?
2.	This	_ produced an important agreement between the two countri
3.	We're having	temperatures, so be sure to drink lots of water.

Reading Comprehension Check-Up I

Finding Details

Choose the best answer.

- 1. What is the main idea of the article?
 - a. Scientists publish many papers, and the ones about global warming are the most popular.
 - b. UN warnings about climate change may be of particular concern to Australia.
 - c. People should visit Australia while there is still time before sea levels rise.
 - d. The island nation of Kiribati is being evacuated because of global warming.
- 2. What specific problem related to global warming are scientists warning Australia about?
 - a. The heating of the earth and prolonged droughts
 - b. A large influx of immigrants leaving other countries
 - c. The lack of consensus on what is causing global warming
 - d. The damage that might be caused by rising sea levels
- Read the following sentence.

More than seventy-five percent of Australians live near the ocean.

Which of the following sentences best expresses the essential information in the above sentence?

- a. The majority of Australians live on the coast.
- b. Most Australians enjoy the beach,
- c. Most of Australia is surrounded by oceans.
- d. Oceans are a popular attraction in Australia.
- 4. What environmental issue did the world previously band together to deal with, according to the article?
 - a. Wildfires

b. Flooding

c. Ozone depletion

- d. Heat waves
- 5. According to the last section of the article, how is Greenland related to concerns of global warming in Australia?
 - a. The people in Greenland are using a lot of fossil fuels.
 - b. The island nation is low-lying and sinking.
 - c. Its ice sheets are melting and causing sea levels to rise.
 - d. Greenland hosted an important meeting of UN scientists.
- 6. According to the last paragraph, why has the issue of global warming divided Australians?
 - a. Because some people think the cost of stopping global warming is too high
 - b. Because some think it's a man-made problem and others think it's a natural cycle
 - c. Because more people are moving to Australia from low-lying Pacific islands
 - d. Because some people do not want to move away from the beach and ocean

Reading Comprehension Check-Up II

Exploring Content

A. Two of the following statements are FALSE, according to the article. Check (v) the FALSE statements.

1	The extreme	heat i	s caused	by	global	warming,	according	to the IPCC chairman.
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- 2. ____ When it came to the ozone layer problem, the world failed to come together to fix it.
- 3. ____ The coastal living many Australians enjoy could be threatened by rising sea levels.
- 4. ____ As a nation, Australia mostly relies on foreign oil for its energy needs.

Rewrite the FALSE statements using information from the article to make them TRUE.

a.	
b.	

B. Match the two parts of each sentence to restate important points from the article.

- The IPCC holds that its research
- Recently, Australians were confronted with
- Australia's climate commission has warned that
- 4. Flooding in coastal parts of
- Queensland shows
- 5. People may be forced to migrate .

- a. a record-breaking heat wave and widespread wildfires.
- b. scorching heat waves may become more frequent.
- c. if their homes become swamped by the rising ocean.
- d. on climate change is both vigorous and reliable.
- . e. how vulnerable low-lying areas are.

Making a Summary

Summary

Fill in the blanks with the correct words or phrases from the box.

vulnerable	vigorous	assert round of talks	reliance across the board	rally depletion
runnandic	rigorous	round or taiks	across the board	depletion
A meeting of 1 _		scientists recently	announced that Australia	ns face certain risks
			ngaged in another 2	
			Saying that the group's	
3	and relial	ole, they are prepared	to 4	that the signs of
global warming a	re unmistakable.	The group's chairman	hopes the world will 5	
			n was taken 6	
the issue of ozon	particularly 8	to rising		
sea levels because	so many of its ci	tizens live along the co	ost. Experts warn that 9	
and extreme floo	oding could beco	ome a regular occurre	nce due to Australia's a	nd other countries'
10	on fossil	fuels.		



06

World Affairs

Human Rights Watch Campaigns Against "Killer Robots"

Warm-Up

Robots can be autonomous, meaning they need no input from humans to function and perform a task, or they can be semi-autonomous, meaning that a human is guiding their every move. While robots have been taking human jobs in factories for decades now, they usually only performed simple tasks in the past. Today they are becoming incredibly advanced. Robots are allowing doctors to perform surgeries with amazing precision and from halfway around the world. Flying robots are also being built that can take off and land without any human interaction. Robotic technology is developing quickly, and this is causing concern for some people.

Points to Notice

Be sure to focus on the specific concerns David Mepham has with unmanned weapons. Also note the claim of what will happen with robots in thirty years that Mepham and the Harvard Law School International Rights Clinic make. Look for the US government's response to that accusation.

Cultural Notes and Background

The idea of killer robots out of control and indiscriminately killing people has been a popular theme in works of science fiction for almost as long as the idea of robots has been around. The very popular Terminator movie franchise is based on the idea that robots and the Skynet computer system that humans designed to protect themselves end up turning on them and nearly wiping out the human race. Movies such as this are often referred to when debates about autonomous weapon systems occur.

Human Rights Watch Campaigns Against "Killer Robots"



An undated US Air Force image shows an MQ-1 Predator unmanned aircraft.

(Reuters)

LONDON — Technology is moving fast when it comes to "autonomous systems"—intelligent machines that perform tasks with little or no human guidance.

In modern warfare, drones and other unmanned vehicles are playing an increasing role, with militaries embracing a technology that they say makes war safer and more effective. But human rights campaigners fear what might be to come—fully autonomous weapons that could select and engage targets without human intervention—and they want a new global treaty to stop that from happening.

In Israel, the country's missile defense system, the Iron Dome, autonomously senses the threat of an incoming rocket and sends a warning to an operator, who then gives the command to fire a missile.

During the recent cross-border violence between Israel and Gaza, Israeli officials said the defense system had an eighty to ninety percent success rate.

Unmanned Aerial Vehicles, or drones, have also played a growing military role, especially in US campaigns.

They provide surveillance, identify targets, and can deliver lethal force—but only if an operator gives the go-ahead.

But David Mepham, the United Kingdom director of Human Rights Watch, said within decades technological advances could write the human operator out of the equation.

"Drones are not fully autonomous weapons," Mepham said. "They involve human intervention in terms of their targeting and the decision to strike, but that has been an increasing trend in the way Western militaries, in particular, have been going in recent years. This will be several technological steps beyond that. It will be a weapons system that takes the human beings out of the loop."

Human Rights Watch has jointly published a report with the Harvard Law School's International Rights Clinic arguing that within thirty years militaries could be armed with autonomous "killer robots."

They said such weapons would be inconsistent with international humanitarian law and would increase the risk to civilians during armed conflict.

In order to prevent a move in that direction, the campaigners are pushing for a global deal that would prevent the use of such weapons, similar to agreements banning the use of landmines and cluster bombs.

"One of the things that holds us back from barbarism in contexts of war is this distinction between combatants and civilians," said Mepham. "And we are worried about a robotic weapon of the future not being able to tell the difference between a child holding out an ice cream and someone holding a weapon."

The US and other militaries have said they have no plans to remove human supervision over the decision to use lethal force, despite advances in technology.

But Britain-based independent security analyst Hugo Rosemont said there should be a public discussion around the future use of autonomous technology, and not only with regard to its military potential.

"There also needs to be a public discussion around some of the wider applications, such as in the use of disaster management and humanitarian relief," said Rosemont. "These technologies can be deployed and have been in those circumstances, and that should be part of the wider discussion in what we think of as autonomy."

He said robots could well do the world plenty of good in the years to come. France sent remotecontrolled robots to Japan to help contain the Fukushima nuclear disaster last year—just one job better left to machines.

> By Selah Hennessy, November 25, 2012 Voice of America



An Iron Dome launcher fires an interceptor rocket near the southern town of Science, November 15, 2012.

(Reuters/Ronen Zvulyn)