

生命和平

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雙月訊

Life & Peace Newsletter Jul.– Aug. 2022 No.07



Age in 2040
Where Will You Be?



Climate change may impact various aspects of our world, including altered seasonal patterns, water scarcity, increased wildfires, rising sea levels, droughts and floods, melting polar ice caps, escalating hurricanes and typhoons, and a reduction in biodiversity.



生命和平大學

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CONTENTS

01 Message from the Founder

Nourishing All Beings with Spiritual Waters

04 Feature article

1.1 degrees Celsius temperature rise, the Earth is on fire.

06 Focusing

Climate Swings and the Butterfly Effect

08 Key Facts

How old will you be in 2040?

10 Earth-Centric Approach

Climate Change Effects Increase Risks in Taiwan

12 Loving Earth Campaign at LJM Buddhist Society

Reducing Global Warming: Can't do it without you!

參考資料：

Page 04-05

● 聯合國政府間氣候變遷專門委員會 (Intergovernmental Panel on Climate Change, 簡稱 IPCC)

● TCIPP 氣候變遷新聞

Page 06-07

● Climate Action, European Commission

Page 08-09

● 聯合國 IPCC 氣候變遷研究報告, Feb. 2022

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Page 10-11

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Page 12

聯合國永續發展目標 SDGs



Message from the Founder By Dharma Master Hsin Tao, founding abbot of Ling Jiou Mountain Buddhist Society

Nourishing All Beings with Spiritual Water

Joining Forces for 'Water for All' – Living Peace Project

Editor's Note: Dharma Master Hsin Tao was invited to participate in the international conference for the "Water for All – Everyone Drinks Water" project. On June 1st, through a recorded video, she conveyed her blessings and gave a speech in support of this charitable initiative that promotes love for the Earth and a peaceful world.

The conference, held from May 30 to June 2 at the Peace Palace in The Hague, Netherlands, focused on the theme "Water for All – Rain Full of Blessings." Spiritual guides were invited to join the event and share their perspectives. The project aims to establish at least 10 clean water houses worldwide in 2022, assisting communities with poor water conditions to access clean drinking water, improving the environment, and enhancing personal health and hygiene.

The event is organized by the "Living Peace Projects," based in The Hague, Netherlands, which actively promotes harmony and peace among religions and religious movements. It encourages spiritual guides from different cultures, traditions, and philosophies to collaborate, creating a positive impact on the world. "Water for All – Everyone Drinks Water" is one of the long-term projects initiated by the Living Peace Projects.



Greetings to the founder of Living Peace Projects and all Earth-loving partners. It's a pleasure to be part of the Living Peace Project and collectively promote the "Ecological Sustainability, Water for Everyone" initiative.

Relentless Greed Poisoning the Earth

"Water" is the life source bestowed upon us by the Earth. The entire ecological system and all living beings depend on the nurturing power of water. However, our current living environment is jeopardized due to human greed, driven by consumerism and wasteful resource production. Expanding livestock farming has led to deforestation, particularly the destruction of the Amazon rainforest, the Earth's lungs, impacting climate worldwide. Insufficient industrial management results in factories emitting harmful gases and wastewater, causing environmental damage.

Most devastatingly, nuclear weapons testing and the development of biochemical weapons through wars push humanity and ecosystems towards a destructive fate. All of this stems from our lack of understanding of Earth's ecology, causing pollution of water resources. Today, it's crucial not only to address water resource issues but also to focus on the entire ecological problem. To make water resources sustainable, we must restore ecological balance. Therefore, we should use spiritual love to irrigate all ecosystems, forming partnerships between ecosystems, caring for each other, respecting, and embracing each other's existence. In such partnerships, sharing will occur naturally, forming an organic cycle.

Spiritual Ecological Governance – Rediscovering Spiritual Love

In last year's COP26 and PWR conferences*, we hoped that various religions would use spiritual water to irrigate the ecological crisis, employing

spirituality for ecological education and governance, rediscovering spiritual love. Spiritual love is within every individual, and the entire universe is a shared life community growing from the source of spirituality within. We coexist in diversity, mutually depend on each other, and support each other.

We strongly support the launch of the "Water for All" initiative by the Living Peace Project and are willing to connect and promote the conservation of water resources and ecological environments. Let's use spiritual waters together to irrigate all beings, connect all ecosystems, and become spiritual partners, making life more beautiful and interconnected.

May Earth be at peace, may the world be in harmony, and may all be happy.

Remarks: Throughout 2021, Dharma. Master Hsin Tao was invited to participate in various online international conferences and forums, including the "Faith and Science: Towards COP26" conference, the "Parliament of the World's Religions," and the "Water-Related Spirituality for Climate Adaptation" dialogue.



Feature article

1.1 degrees Celsius temperature rise, the Earth is on fire.

Why should you care about climate change?

Why can't you afford not to know?

Because our planet is getting hotter and hotter!

Main Causes of Climate Change

Climate change refers to long-term changes in temperature and weather patterns. This change can come from nature, such as the solar cycle. However, since the 19th century, human activities have become the main cause of climate change, especially the combustion of fossil fuels such as coal, oil and natural gas, the emission of greenhouse gases (Greenhouse gases), these gases cover the earth and absorb the heat of the sun, contributing to

the increasing temperature of the earth.

The main components of greenhouse gases are carbon dioxide and methane: these gases come from sources such as gasoline used for transportation or coal burned for energy; carbon dioxide is also emitted from land reclamation and forests; and landfills and animal husbandry are among the main sources of methane emissions. In short, energy, industry, transportation, buildings, agriculture and land use are all major sources of greenhouse gas emissions.

Emissions continue to rise, and the temperature between 2011 and 2020 was the warmest decade on record since industrialization. As of today, temperatures are 1.1 degrees Celsius warmer than they were at the end of the 19th century, which means that human-induced climate change is increasing to a disturbing level of 0.2 degrees Celsius per decade.

Curbing Future Climate Change

From a scientific point of view, controlling

anthropogenic global warming to a certain extent requires curbing the accumulation of carbon dioxide (CO₂) emissions to at least net-zero, and significantly reducing other greenhouse gas (GHG) emissions. The choices and actions taken by the world in the next decade will determine the key to the future of climate resilience development in the face of climate change.

Reference:

United Nations Intergovernmental Panel on Climate Change (IPCC)

TCIPP Climate Change News



Impact 1

According to a new study published in the AGU Journal, which estimates the degree of heatwave exposure for people of different income levels around the world, on average, people in the lowest income regions will face 23 more days of heatwaves per year than those in the highest income regions. However, high-income areas will also be forced to experience rotating power outages or even blackouts due to a lack of electricity supply.



Impact 2

According to the BBC, climate change has altered the extent of hail damage. From the UK to Canada, to Texas, Colorado and Alabama in the US, the size and weight of hailstones have broken records again and again over the past three years, and these super-sized hailstones have made the damage more and more serious, with the US alone incurring losses of more than US\$10 billion a year.



Focusing

Climate Swings and the Butterfly Effect

What Phenomena Are Scientists Observing? Impacts of Climate Change on the World

As human activities, especially during the industrial revolution in the age of oil, release large amounts of greenhouse gases, the climate system becomes increasingly unpredictable. This triggers various challenges and difficulties for different countries and regions,

significantly impacting the overall safety of ecosystems. How do scientists discover and observe climate change, and what threats does it pose to the world? They have several crucial indicators worth our ongoing attention.

Observational indicators



North and South Polar Glaciers

Greenhouse gas content of glaciers sampled at the North and South Poles.



Annual Rings

Based on the changes in the annual rings of trees, scientists can predict what climate change will look like.



Carbon Dioxide

The proportion of greenhouse gases, especially carbon dioxide, in the atmosphere.



Satellite Images

Observe the change and decrease of snow and ice in the Arctic and the South Pole.



The climate is becoming more and more unstable, with varying degrees of impacts across the region.

The overall climate system is changing and has the power to change the world. The impacts are spreading to all aspects of our daily lives: from food shortages and water shortages to our public health and well-being. The bigger the problem, the

more difficult and costly the solution will be, which is why it is important for us to continue to be aware of the changes in the climate system, to prepare for the impacts of climate change on our lives as soon as possible, and to actively practice low-carbon living and green consumption in our lives.

Climate Change Threat Estimation



Increased Mortality and Morbidity

Observe the change and decrease of snow and ice in the Arctic and the South Pole.



Crop Impacts

erratic seasonal changes, heat waves, and extreme droughts can affect harvests.



Water Resources

water availability is becoming increasingly scarce.



Sea Level Rise

Heavy rainfall, more frequent flooding, and rising sea levels.

Global warming could reach 1.5 degrees Celsius by 2040, with a 20% increase in the population exposed to 100-year floods. By 2050, two-thirds of the urban population will be exposed to extreme climate "hard-to-adapt" risks, and some places will be uninhabitable.



Source: UN IPCC Climate Change Study, Feb. 2022

Key Facts

How old will you be in 2040?

What will be the average temperature of your future life under the continuing impact of climate change?

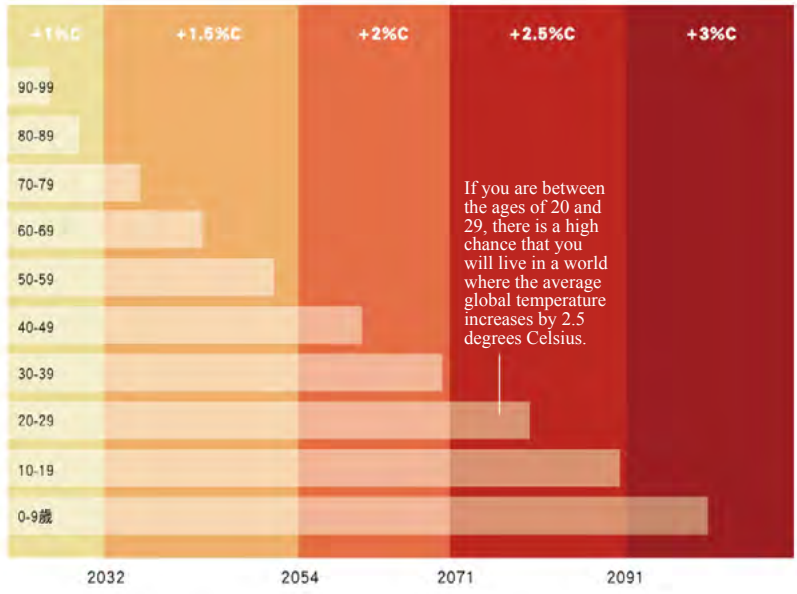
No matter how old you are now, most people will be living in an environment where the global average temperature rises by 1.5 degrees Celsius in the next few years. Children under the age of 10 this year are likely to be living in an environment where the average global

temperature will rise by 3 degrees Celsius, making the earth an extremely inhospitable place to live!

Based on the available data, it is estimated that the current generation of 20 year olds will be living in an environment with a global mean temperature increase of 2.5 degrees Celsius by 2071, when they will be about 70 years old. But what will be the impact of this increase in global average

Global Warming Mean Temperature Rise vs. Age

The average global temperature you will experience in your life's journey according to your current age.



temperature? According to the United Nations IPCC, it is estimated that for every 0.5 degree Celsius increase in average temperature, natural disasters such as dry heat waves, forest fires, and intense rainfall will occur more frequently and with greater force.

Image source: German visual media
Datawrapper on Twitter, July.08.2021.
Reference: Hans Hack, an engineer at the company, estimated the average global warming temperature that each generation will likely experience in the future, taking into account the results of a study by Raftery et al. published in the journal Nature, as well as the average life expectancy (German government data).

Climate Change Effects Increase Risks in Taiwan



Number of days with high temperature above 36°C

Future extreme high temperatures are expected to increase the number of days with high temperatures above 36°C. In the worst case scenario, the number of days with high temperatures above 36°C will at least increase. Under the worst case scenario, the number of days with high temperature above 36°C will increase by at least 8.5 days, and at most 48.1 days, with a significant increase in urban areas.



Number of typhoons, proportion of strong typhoons, and rainfall variability affecting Taiwan

By the end of the 21st century, under the most severe conditions, the number of typhoons affecting Taiwan will decrease by 55%, the proportion of strong typhoons will double, and the rate of change in typhoon rainfall will increase by up to 35%.



Summer is 210 days long

In the future, it is estimated that the length of summer in Taiwan will increase from the current 130 days to 155-210 days, or even more than half a year, while the length of winter will decrease from the current 70 days to 0-50 days.



Uneven droughts and floods, water scarcity crisis

Under a warming scenario, the water resources in the catchment areas will show greater differences in the abundance and scarcity of river flows, with a decreasing trend in spring (February to April) in the middle of the century, and even more significant changes at the end of the century, which may increase the risk of drought and flooding.

According to the research report released by IPCC this year, global warming will increase the temperature by 1.5 degrees Celsius in a short period of time (2021-2040), and various climate hazards will inevitably occur, and Taiwan's current ecosystem and human society will also face multiple risks.



Increased risk of infectious disease transmission

Under warming conditions, the distribution of *Aedes aegypti* in the middle of the century may extend northward across the existing border of Tainan and Chiayi, and there is also a tendency to extend northward in Hualien East, which will lead to an increase in the risk of dengue fever. At the end of the century, the distribution range of *Aedes aegypti* continued to expand northward



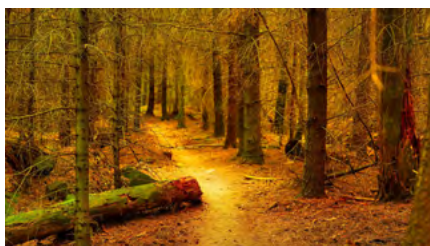
Declining Farming Harvest

Taiwan's rice production is on a downward trend, and the second stage of the rice harvest may even be reduced by as much as 17 to 20%.



Reduced air quality in winter

Under the warming scenario, poor winter air quality (AQI greater than 100) due to climatic factors (weakened winds, increased stability, and shallower boundary layers) is on the rise in the western half of the country, with a more pronounced increase in the central and southern regions.



Significant decrease in alpine forested areas

Alpine ecosystems are sensitive to rising summer temperatures. Due to the lack of migratory pathways and the additive effects of warming, it is predicted that the suitable area for alpine scrub and hemlock forests will decrease dramatically by the end of the century (between 16% and 50% of the current area). Reducing the carbon transport capacity of alpine forests increases the risk of climate change.



Reducing Global Warming: Can't do it without you!



Loving Earth Campaign at Ling Jiou Mountain Buddhist Society Nine Sustainable Living Principles.



Dialogue: Humility,
listening and understanding
are the basis of dialogue.

Responding to the UN Sustainable Development SDGs



SDGs Goal 13
Climate Action
Through education,
innovation and adherence to
our climate commitments,
we can make the necessary
changes to protect the
planet.

Love Earth Campaign Include it in your home life



Dry naturally

Allow your hair and clothes to dry naturally and minimize the use of machines. When using the washing machine, remember to concentrate on a full load.



Composting

Composting food waste can reduce climate impacts.



Shower

A bathtub soak requires more water than a 5-10 minute shower.



Reduce garbage

Recycle paper, plastic, glass and aluminum to reduce the burden on landfills.



Eat more vegetables

Eat less meat and fish. Meat uses more resources.

Increase Energy Efficiency

Adjust temperature controls to be lower in winter and higher in summer; prevent gaps in windows and doors to maximize cooling and heating.



