



FEATURED ARTICLES

- The Concept of Sustainable Development in the Tokyo Olympics
- 2 Under the Dome
- 3 Can companies help achieving carbon neutrality?
- Is Electric Vehicle Our Best Hope?
- 5 If life becomes like this, what would you do?
- 5 Emojis Can Become Online Hate Speech: About Flaw in Al
 - Women in Macau The Stories and Power Behind The Scenes

THE CONCEPT OF SUSTAINABLE DEVELOPMENT IN THE TOKYO OLYMPICS

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During the Tokyo Olympic Games, CCTV has authorized TDM to broadcast the games in Macau, presenting the Olympic feast to the general public. In addition to the athletes' hard work, some details of the Olympic Games have also fully reflected the concept of sustainable development.

In 2015, the United Nations adopted the 2030 Agenda for Sustainable Development and 17 Sustainable Development Goals, which clearly stated that "sport is also an important driver of sustainable development". For this year's Olympic Games, the Tokyo Organizing Committee has adopted "Be better, together - For the planet and the people." as the concept of sustainable development. Under this concept, there are five major themes. These include:

1. Climate Change - "Towards Zero Carbon"

2. Resource Management - "Zero Wasting"

3. Natural Environment and Biodiversity - "City within Nature/Nature within the City"

4. Human Rights, Labour and Fair Business Practices - Operate the Games in accordance with the UN's Guiding Principles on Business and Human Rights
5. Involvement, Cooperation and Communications (Engagement) - Through the participation and collaboration of entire society, to create the Games which open to everyone

In the following, I will use the medals and podiums of this year's Olympic Games as examples to further point out the concrete facts of the concept of sustainable development.

The medals are related to the materials used in their production. In order to make medals for the Olympic Games and Paralympic Games, the Olympic Committee launched a project called "Tokyo 2020 Medals" to collect small electronic devices, including used cell phones, from the public. From April 2017 to March 2019, all the metals needed to make about 5,000 gold, silver and bronze medals were extracted from the small electronic devices donated by the entire Japanese society (the final amount of metals collected: gold, about 32 kg; silver, about 3,500 kg; and bronze, about 2,200 kg). In other words, every medal awarded to athletes during the Olympic and Paralympic Games is made of recycled metal.

The podiums are made of recycled plastic. The project started in June 2019 with an appeal to people to donate recycled plastic household products, and with the



active participation of major Japanese retailers, 113 schools and P&G, the Olympic Committee achieved its goal in March last year, collecting 24.5 tons of recycled plastic in about nine months, equivalent to 400,000 bottles of 900-gram laundry detergent. The Tokyo Olympic and Paralympic Games were the first Olympic Games in history where the public participated in the production of the podiums.

When we see the outstanding athletes on the podium to receive medals, we should also know that the concept and practice of sustainable development is interpreted behind. In fact, the concept of sustainable development can be seen everywhere, whether in the Olympic feast or in our daily lives, let's take action and make positive contributions to the road of sustainable development.

Text me when you're home

"Text me when you're home." This heart-warming reminder that probably every woman/girl has been reminded by their friends after a night out. But have you ever given it a second thought of what it implies?

A 20 years survey conducted in 29 European countries by the European Social Survey that men reported feeling safer than women while walking alone in their local area after dark. Recently, concerns about women's safety at night were again raised in the communities after the murder of Sarah Everard and Irene Chung; both were kidnapped and murdered on their way home at night in London and Taiwan. However, some claimed that women should not go out after midnight and put themselves in danger. In contrast, others hold a different view that women shouldn't modify their behavior to protect themselves from men.

Nonetheless, we deeply believe everyone, regardless of age, gender and ethnicity, should have the right to go out without fear, no matter when or where they are.



Under the Dome Gladys Ng

This June was the fifth warmest ever recorded in history, and 2021 is on its way to become one of the hottest decades on record. Meanwhile, global average temperatures have been rising and extreme heat waves have become more frequent in the recent decades.

The west coast of North America has recently experienced a heat dome which caused hundreds of fatalities. A Canadian province of British Columbia had recorded temperatures of over 45 degrees Celsius, which the region has never seen before. For a place that has always had an average summer temperature of about 24 degrees Celsius, this heat wave had completed taken everyone there by surprised.



Cities that are used to cooler summers do not have air conditioners installed, and now they have to seek shelter from the heat wave. The urban infrastructure under the "dome" is also tested: the road surface begins to crack under the extreme heat, even cables began to melt and swell due to the high temperatures, rendering the public transport system unable to operate normally.

The heat dome not only affected people and plants living on land, but it also has devastating effects on underwater life. According to biologists at the



University of British Columbia, the extraordinary heat may have killed more than a billion marine lives.

Where did this life-threatening heat dome come from? The answer may be the same group of people suffering from it.

A heat wave is defined by local weather conditions. Normally it is considered a heat wave when above-average temperatures persist over a few days. This "heat dome" phenomenon is linked to temperature gradient across oceans, anticyclone and global warming caused by climate change.

Last year was the "Eastern Pacific Cooling phase" ("La Niña") in which sea surface temperature in the eastern Pacific (North America) were lower than that in the western Pacific (Asia and Oceania), and warmer sea surface temperatures in the western Pacific warmed the air above and carried east by prevailing winds and trapped by a high-pressure anticyclone that was forming over on the east side, forming a heat dome.

The anticyclone acted like a lid to capture the warm air blew from across, making the area under the hot dome is like a convection oven, where warm air cannot escape under high pressure and cold air cannot enter. The rising temperatures due to climate change have also amplified the effect of the heat dome.

Many climate scientists, including experts from the World Meteorological Organization and the Met Office (UK's National Weather Service), agree that the frequency of extreme heat waves is almost impossible without the impact of climate change. And climate change will only continue to increase the frequency and severity of extreme weather events.



According to the Lancet 2030 Countdown China report released last year, people aged 65 and above suffered 13 more heatwave days in 2019 compared to the baseline; deaths from heatwave-related illnesses have increased fourfold in the past 20 years. Indeed, according to the data from the China Climate Bulletin 2019, 2019 was the fifth warmest year on record and had the second the greatest number of high-temperature days in history.

Extreme heatwaves not only cause heat stroke and heat exhaustion, but also heat-related diseases, including cardiovascular and respiratory complications. In addition to human health risks, extreme heatwaves can further threaten public health by affecting vital industries such as agriculture and energy.

Average global temperatures have risen by 1.2 degrees Celsius since preindustrial time. And given current carbon emission levels, it is expected to rise by more than 3 degrees Celsius this century. These numbers may seem minimal, but the casualties and suffering they can cause will be unmeasurable. Under the same dome, no one will be immune to the changes. To have a future where everyone can live under normal weather, action must be taken today to slow down climate change.

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Can companies help achieving carbon neutrality? Samson Cheng

According to the Paris Agreement, countries are required to limit the global average temperature increase to 2 degrees Celsius this century, and strive to keep it within 1.5 degrees Celsius above the pre-industrial level. Even in the face of depression, an increasingly complex international politics, and the COVID-19, many countries have "voluntarily adopted" the goal of net zero emissions or carbon neutrality.

On September 22, 2020, President Xi Jinping announced that China is striving to peak its carbon dioxide emissions by 2030 and to achieve carbon neutrality by 2060 in the 75th United Nations General Assembly.

According to the Energy & Climate Intelligence Unit (last updated August 12, 2021), two countries, Suriname and Bhutan, have already achieved carbon neutrality, 11 countries, including the EU as a whole and Japan, have written their carbon neutrality targets into national law, 4 countries, including Korea and Chile, are in the process of legislation. Fourteen countries, including the United States and Portugal, have issued policy declarations. Hong Kong SAR has also stated in its 2020 Policy Address that it will "strive to achieve carbon neutrality by 2050".





For mainland China, the carbon peaking and carbon neutrality plan lies in the "decoupling" of socio-economic development and greenhouse gas emissions in each province and city, i.e., while economic growth and energy demand increase, the new energy must be clean non-fossil energy, so that carbon dioxide emissions will not increase with economic growth. Therefore, mainland China is actively deploying low-carbon transformation and development of new energy and other low-carbon technologies, as well as promoting the peaking of carbon emissions from high-energy-consuming industries such as steel, cement, chemical and petrochemical industries in developed coastal areas during the 14th Five-Year Plan period, so as to drive the country to achieve the peaking of carbon dioxide emissions by 2030 in general.

Macau is an international free port, with light industry, tourism, hotels and gaming as its pillar industries. Macau's tertiary sector and transportation sector are the main consumers of end-use energy, with the tertiary sector's energy demand dominated by electricity, making it more difficult to apply the Mainland's industrial restructuring approach to emissions reduction.

In the globe, large international corporations such as Amazon, Microsoft, Nestle and Siemens have set their carbon neutrality targets. Domestically, on January 12, 2021, Tencent announced the launch of its carbon neutrality plan, actively responding to the carbon neutrality target and becoming one of the first Internet enterprises to launch the carbon neutrality plan; China Baowu, the world's largest steel company, proposed to "strive to achieve carbon peak by 2023, reduce carbon by 30% by 2035, and strive to achieve carbon neutrality by 2050.



In Macau, Melco Crown Entertainment Limited has set the goal of "achieving carbon neutral resorts by 2030" in its 2018 Sustainable **Development and Corporate Social Responsibility Report. Although** the other five gaming companies have written sustainability and CSR reports in recent years and have a series of environmental measures, they still do not have specific plans related to carbon peaking and carbon neutrality. The gaming industry, as a pivotal industry in Macau, has a large capital scale and accounts for a large part of Macau's energy and resource consumption. As listed companies, the six gaming companies are obliged to undergo sustainable transformation as the major stock exchanges require green and socially responsible disclosure and investors become more aware of environmental risks. At the same time, with the renewal of the gambling license in 2022, the Macau government can ask the six gaming companies to take the lead in proposing their own sincere and measurable carbon plans, so as to contribute to the overall emission reduction in Macau on the one hand, and to make Macau citizens more aware of the concept of carbon neutrality and climate change on the other.

For other Macao enterprises, they should also pay attention to the challenges and opportunities under the climate change crisis, carbon peaking and carbon neutrality. For example, whether the construction industry will face greater costs in the gradual implementation of the carbon market in China; whether the financial industry will face greater climate risks, and whether new businesses such as carbon asset management can be explored.

As Inger Andersen, Executive Secretary of the United Nations Environment Programme (UNEP), said, "On a warming planet, no one is safe. And every business, every investor, every citizen needs to play their part."

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Is Electric Vehicle Our Best Hope?

A low carbon future is a popular topic wherever you look. From policy to business strategy, a lot of focus is on decarbonizing the energy sector and adopting renewables to power the world. For example, the European Union has set the goal to reduce 90% of the greenhouse gases emissions from transport by 2050. Meanwhile, China is pushing for the target of 20% share for new energy vehicles (including battery uel cell electric vehicles) in new vehicle sales by 2025.



The growth of electric vehicles has spurred the high demand for lithium, which can a huge cost to the environment and society, especially where the material is mined - a majority in the Lithium Triangle (Argentina, Bolivia, and Chile). The mining process requires a lot of groundwater, which can cause a conflict of water use with agriculture in those dry regions. Toxic chemicals can pollute the soil and water stream in the process, causing further damage to the lives and wellness of the local community.

But mining for new material is not a must. Recycling old batteries is a great alternative. The EU has recently drafted a new battery regulation, which places requirements on the sustainability of vehicle batteries and industrial batteries including carbon footprint and content of recycled raw materials. If we want to achieve a truly green and clean future, we must seriously consider whether the "new" energy alternatives are truly sustainable to avoid exacerbating the existing problems.



If life becomes like this, what would you do?

If you want to go out, you must be accompanied by relatives of the opposite sex. Without wearing a burga, it is very likely to face a beating.

No matter how old you are, you are not allowed to go to classes or receive education, and you are not allowed to work.

Even if you have done nothing wrong, you may still experience different forms of violence from time to time, such as physical, sexual, and mental violence.

You are very likely to marry involuntarily before reaching the age of 18, or even before the age of 15.

If you are considered "indiscreet", then family members may take your life for saving the "honor" of the family.



Just thinking about it makes it scary, right.

And this kind of life was truly experienced by Afghan women under Taliban rule 25 years ago.Although the situation of Afghan women has improved slightly in the past 20 years, Afghanistan is still one of the worst areas for women and girls in the world.

On August 15, the Taliban captured Kabul, the capital of Afghanistan, and has since taken over Afghanistan. Although the Taliban leaders promised that Afghan women will continue to enjoy equal rights in accordance with Sharia law, including the right to work and education, this has not alleviated local women's worries about the future. Having experienced those nightmares, who can easily forget?

We don't know whether the Taliban can really protect women's rights as promised. But the situation of women in Afghanistan urgently needs global attention. We pray that under the pressure of attention from countries around the world, the Taliban will not let the history of 25 years ago repeat itself.



Emojis Can Become Online Hate Speech: About Flaw in AI

Recently, three Black soccer players lost in England's tournament final on penalties, and they had since been a subject of online hate speech. The internet was flooded with comments using racist emojis such as monkey and banana targeted against them, but social media platforms were unable to detect and address these comments.



According to the Oxford Internet Institute's recent findings, existing Artificial Intelligence (AI) machine learning systems for content inspection fail to effectively detect online hate speeches that involve the use of emojis. This includes commercial Artificial Intelligence (AI) systems like Google Jigsaw, which tackles cyber threats.

Although humans could understand the meaning behind emojis, AI language modeling could only treat emojis as characters. The findings show that AI systems need to be trained on data involving emojis used in different contexts. The solution to this flaw in AI system is to keep training such system models on diverse and adversarial emoji-based hate content.

New series from Genervision: Women in Macau - The Stories and Power Behind The Scenes

[Episode 1: Patinda Lei]

Although Macau is tiny, it has fostered many outstanding women. However, the challenges they have endured are often little known. In this episode, you are able to explore the story of a Macau entrepreneur, Patinda Lei, who studied in Japan and has been working in the Greater Bay Area for decades.

Link to the video:





