



J.O.E 环保联盟

J.O.E ECO Alliance

2018年第一期
No.1 2018



**与地球有个约，从我们做起，
星火一定可以燎原！**

**A promise to Earth, let us all join our hands,
a single spark can start a prairie fire!**

每一个人一定要知道真相！

我们的地球已经病得非常严重——人类行为造成的环境污染已经到了无可复加的地步！全球环保不只大家直接受益，想想子孙后代今后的生存空间，就应该自觉环保、立法环保！这绝对是一项伟大的造福工程。

与地球有个约，从我们做起，星火一定可以燎原！

It is an inconceivable truth.

We are in the critical stage of the battle against environmental degradation. Pollution brought about by human activities has reached unprecedented level!

It is never too late to conserve this fragile living space for our future generations, we shall, from now, place special emphasis on environmental protection in our everyday life.

With the support of government legislations, we call upon everyone to fight this battle together, say no to pollution and wastage.

We are not alone. Let us work together for the benefit of mankind.

小川舒先生 (Mr. Xiaochuan Shu)



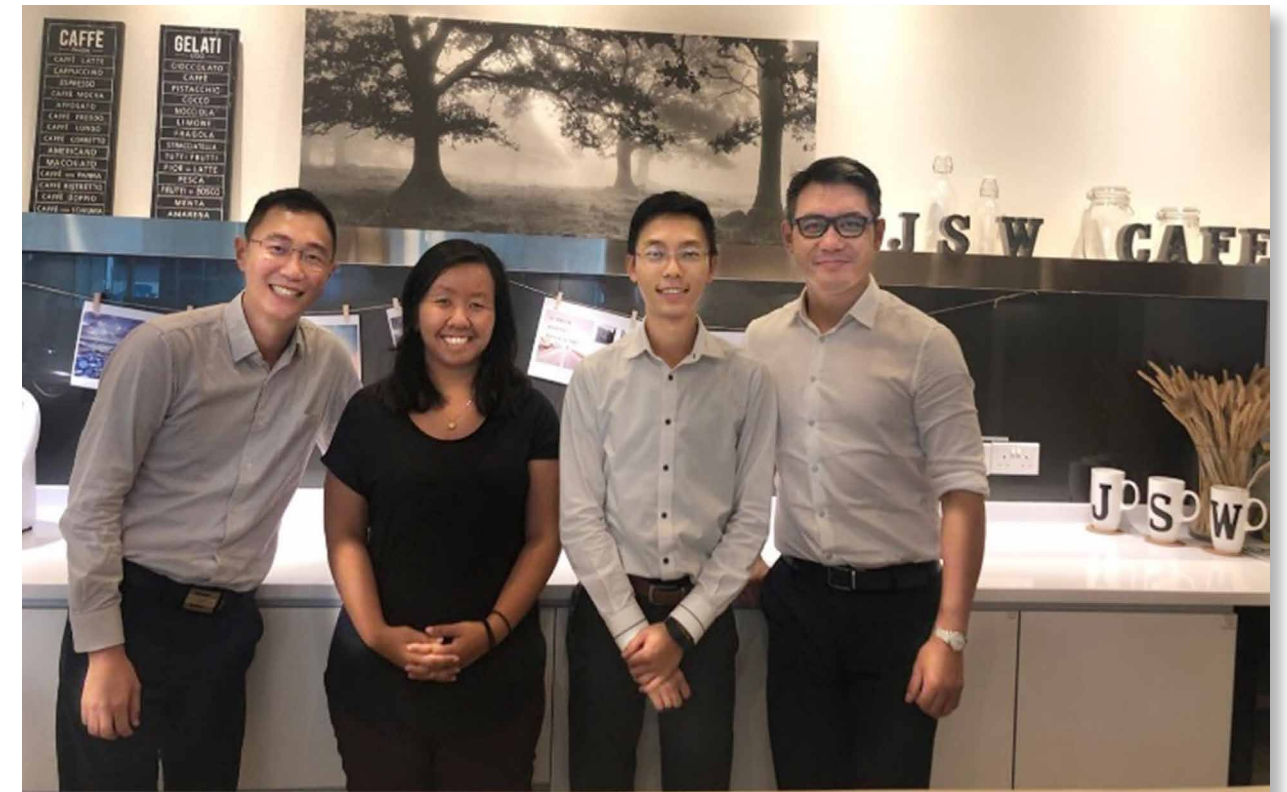
Nor Lastrina Hamid
Manager, Community Development of People's Movement to Stop Haze (PM Haze) &
Co-Founder, Singapore Youth for Climate Action (SYCA)

In January 2018, Singapore's Ministry of Environment and Water Resources launched the Year of Climate Action - a year-long national initiative aimed at raising awareness on climate change. The Climate Action Pledge, where individuals, organisations, and educational institutions can show their commitment towards taking climate action was introduced. As of 15 September 2018, more than 275 778 pledges were made.

As an environmental activist in Singapore, while these commitments and amount of pledges were motivating for me, what I found more meaningful is the fact that some of the individuals and organisations that I met have decided to do much more than what the pledge board suggests.

The Singapore office of JSW Advisory for example has a positive office culture; employees volunteer at Tzu Chi Singapore and do hands-on recycling, they bring their own Bring-Your-Own (BYO) kit for their takeaway lunches, and there is now a small team dedicated to organising sustainability related talks and tours for their employees and other tenants in the building they are in. It is very easy for any organisations to 'tick boxes' on a pledge board, but to actually do them, and commit to more, to me, shows tremendous dedication to care for the environment.

It is my hope that the environmental stewardship shown in JSW Advisory Singapore office is also practised in the Japan and China office. Ensuring a sustainable and circular economy across its supply chain not only protects the environment, but can be profitable too. May JSW Advisory and the J'S Group be a leader in this.



Nor Lastrina Hamid 小姐及同事拜访 JSW

2018年1月，新加坡环境与水资源部推行了为期一年的国家计划‘气候行动年’，旨在提升公众对于气候变化的认知和意识。个人，组织或教育机构均可以通过‘气候行动承诺’的形式参与到该活动中。截止到2018年9月15日，已经有超过275,778份承诺提交。

作为一个新加坡的环保积极参与者，我一直被这些承诺书鼓舞和激励着。与此同时，我发现更具意义的是和我曾接触过的一些个人和组织，他们不仅仅只满足于行动承诺的要求，而是决定为之付出更多。其中，新加坡JSW咨询便是正向积极的企业文化典范。该企业中的一些员工是慈济慈善基金会的义工，定期亲自参与垃圾回收分类活动；并且公司员工自带午餐打包饭盒（BYO）；他们目前已成立了一个专项部门，向员工以及公司所在的办公楼内的其他企业住户推广可持续性发展相关教育宣导以及环保实践活动。

平心而论，在承诺书上做出承诺很容易。但我认为，只有事无巨细的亲力亲为，所做远超过所承诺的更多，才是对环境保护真正的、巨大的贡献。

我希望JSW 新加坡分公司的环保管理工作同样也可以在其日本和中国的分公司有序的开展，不仅仅在环境保护方面，同时也在其产业链上形成一个可持续的，循环的经济模式。最后，衷心祝愿JSW咨询和J'S集团在这个领域成为一个领导者！

“新加坡属低洼岛屿，大部分地区仅位于海拔15公尺。随着气候暖化，本世纪末，新加坡的每年平均气温预计将增加1.4摄氏度至4.6摄氏度，海平面则预计上升25公分至76公分。”

Singapore is the low-lying island, most areas are only 15 meters above the sea. Along with warming climate, the average daily temperature predicted to increase by 1.4 °C to 4.6°C while the sea-level to rise by 25 cm to 76 cm;

世人皆知，新加坡是一个美丽的花园国家。凭借着新加坡人的智慧和勤劳的双手，勇于开拓的精神，各个领域已取得骄人的成绩。政府对环保工程投入巨额资金，特别是在垃圾处理技术和能力方面举世瞩目，所以人们更有理由去保护好来之不易的今天。

Everyone knows Singapore is a beautiful country. Singaporean have achieved remarkable results in various fields by their wisdom, hard-working and pioneering spirit. The government has invested abundant amount of capital into the environmental protection engineering. Especially the achievements of waste disposal technologies and abilities are world well-known. Singaporean have more reasons to protect these hard-won gains.

但是近年来，新加坡面临越来越多的环境保护问题，如：

新加坡属低洼岛屿，大部分地区仅位于海拔15公尺。随着气候暖化，本世纪末，新加坡的每年平均气温预计将增加1.4摄氏度至4.6摄氏度，海平面则预计上升25公分至76公分；一次性餐具、塑料袋的使用数量处急剧上升趋势；

In recent years, we are facing more and more environmental issues:

Singapore is the low-lying island, most areas are only 15 meters above the sea. Along with warming climate, the average daily temperature predicted to increase by 1.4 °C to 4.6°C while the sea-level to rise by 25 cm to 76 cm; The number of disposable tableware and plastic bags is rising sharply.

据环境理事会调查数据，近7成公众不知可循环塑料垃圾分类而造成资源的浪费和污染：

路边散落的垃圾在增多，组屋区的垃圾桶填满后，会有更多的垃圾丢弃在桶周围，常有蟑螂和老鼠爬过；国人汽车需求量不断增多，尾气排放量增加而造成气温上升。



According to the survey by Singapore Environmental Council, nearly 70% of the public do not know how to sort recyclable plastic trashes which result in waste and pollution of resources:

More trashes are scattered on the roadside and discarded around the fully-filled garbage bins of HDB, cockroaches and mice crawling over; People's demands for cars are rising. Increased exhaust emissions causes high temperature.

我们不禁要问，当我们自己开始松懈生存危机意识，不去积极地爱护自己的家园，那么，当生态危机和自然灾害突然不请自来的时候，这个美丽的小岛还有多少力量与之抗衡？

We can't help asking ourselves, if we don't keep the crisis awareness always in mind and not to protect our own home but just let it get worse, how we can face and fight against the ecological crisis and natural disaster happen suddenly?

根据数据显示，海洋塑料垃圾产生国的前十位有泰国、越南、菲律宾、马来西亚和印尼等国家。这意味着，新加坡不仅要自身环保，而且还要呼吁全球环保，输送环保技术和加大环保宣传力度，使世界各国一道行动起来保护地球、保护人类家园。不然新加坡也会难免被周边国家的生态灾害和环境问题所波及。

According to the survey, the top ten of producers of marine plastic waste include Thailand, Vietnam, Philippine, Malaysia and Indonesia. It means Singapore can't only focus on own environmental protection but also needs to advocate countries worldwide trying to make them participate in as well, otherwise, Singapore would definitely be affected by the natural disasters and environmental issues caused by neighbour countries.

真正的危机不只是“环境危机”，更重要的是“意识危机”。如何帮助有环保意识、有责任心的人们更科学更有效地去从事环保活动？如何为那些还对环境问题漠不关心的人们，在内心播种一颗环保意识的种子？如何凝聚更多的力量，让更多的人参与到环境保护和教育之中来？这些问题就是我们决定成立J. O. E联盟的初衷和理念。

The real crisis is not 'environment crisis' but is 'awareness crisis'. Our original intention and idea to establish J.O.E Eco Alliance is to help the people who have strong awareness and responsibilities of environmental protection to act more scientifically and effectively and to awaken those who are still indifferent to the environmental issues and to plant a seed of environmental protection in their hearts. These are also the goals we are determined to work hard for!

我们希望每一个人都要采取更积极更有效的行动，去保护我们的家园！我们更需要有效的法律对破坏生态环境和城市环境的行为予以约束。有法可依，依法办事，违法必究。人们才会逐渐自我约束、自我改变，使环境保护成为一种行为习惯！

在此，我们真诚地邀请您及您的企业、机构或组织，加入J. O. E环保联盟，让我们凝聚群体的力量和智慧，带着我们保护地球的使命感、带着我们对子孙 后代的责任感而行动起来吧！

Hopefully everyone can take more active and effective actions to protect the environment and our home! However, we need effective laws to constrain the serious damage to the ecological environment more. Nothing can be accomplished if without norm or standards. It needs to ensure that laws are put in place, observed, and strictly enforced and that anyone who violates the law is held to account then people will gradually self-discipline and self-change, form a natural awareness of environmental protection, make it a behavioural habit.

Therefore, we sincerely invite you, your company or organization to join in us, J.O.E Eco Alliance! Let's by our wisdom and power take actions along with the mission of protecting earth and responsibility to children and future generation!



聆听

Voice



人类只有一个地球，地球是我们的共同家园，
而我们的家园正在承受着。。。。

The earth, our common home, is painstakingly enduring...

垃圾污染

Waste Pollution

分类：工业废渣污染和生活垃圾污染

Category: Industrial waste and domestic waste pollution

形成：这意味着，工业废渣是指工业生产、加工过程中产生的废弃物，主要包括煤矸石、粉煤灰、钢渣、高炉渣、赤泥、塑料和石油废渣等。生活垃圾主要是厨房垃圾、废塑料、废纸张、碎玻璃、金属制品等。在城市，由于人口不断增长，生活垃圾正以每年10%的速度增加，构成一大公害。

Cause: : Industrial waste is the by-product of the manufacturing and production process, it generally includes ashes, gangue, sludge, and petroleum by-products. Domestic waste is highly associated with our everyday life, such as food waste, scrape paper, used plastic and glassware and other household metallic hardware. 10%

酸雨蔓延

Acid Precipitation

定义：pH值小于5.6的雨水

Category: Industrial waste and domestic waste pollution

形成：酸雨主要是人为的向大气中排放大量酸性物质所造成的，主要因大量燃烧含硫量高的煤而形成的，此外，各种机动车排放的尾气也是形成酸雨的重要原因。

Cause: Sulphuric oxides, discharged through combustion of coal and fuels, is released into the atmosphere. **The oxides combine with the water vapour in the atmosphere to form acids and reducing the pH level of the rain. Untreated exhaust emission is another major cause of acid precipitation.**

more domestic waste is being generated year over year due to growing world population and causing major environmental issues.

危害：这对水环境的污染，对大气环境的污染，侵蚀土地，对人体健康的危害。

Threat: waste pollution is harmful to our water resources and clean air. It also takes up our valuable land resources and cause harm to our health.



危害：农作物及树木死亡，雕像被腐蚀

Threat: Crops and trees die when they are unable to adapt to the acidity in the soil. Acid rain is also causing valuable structures or statues to erode.

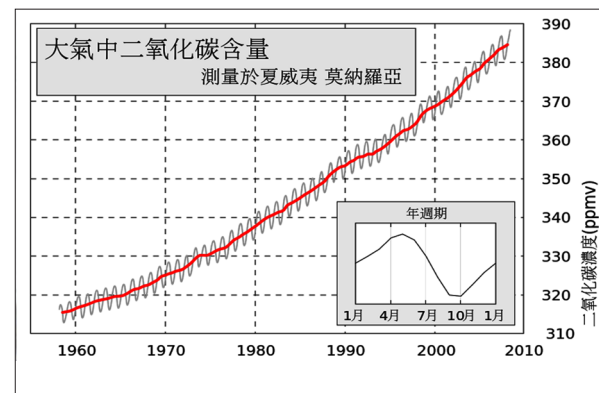


全球气候暖化

Global Warming / Climate Change

定义：由于温室效应不断积累由于温室效应不断积累，导致地气系统吸收与发射的能量不平衡，能量不断在地气系统累积，从而导致温度上升，造成全球气候变暖。

Definition: Continuous emission of the vast amount of greenhouse gases traps heat energy from escaping from earth's atmosphere. The mean surface temperature of earth is in a steady rise, causing global warming.



原因：砍伐树林、燃烧化石燃料、大量畜养家禽等导致过多的温室气体排放，空气中二氧化碳的浓度增加。

Cause: Greenhouse gases, such as carbon dioxide, methane and nitrous oxides, are released largely due to human activities of deforestation, fuel burning and raising livestock in an industrial level.

危害：

- 形成大型，甚至超大型台风、飓风、海啸，森林火灾等灾难。
气温升高从海洋和陆地直接吸取水分，使内陆地区大面积干旱，农作物减产。
- 气温升高所融化的冰山，导致人类赖以生存的淡水缺乏。
- 气温升高使得自然界食物链逐渐断裂，使海洋食物链从最底层开始，向上迅速断裂，海洋中大量生物死亡。

- 气温升高会給人类生理机能造成影响，生病几率将越来越大，各种生理疾病将快速蔓延，甚至滋生出新疾病。眼科疾病、心脏类疾病、呼吸道系统疾病、消化系统类疾病、病毒类疾病、细菌类疾病……
- 病菌通过极端天气和气候事件（厄尔尼诺现象，拉尼娜现象，干旱，洪涝，热浪等），扩大疫情的流行，对人体健康危害很大。

Threat:

- Formation of super typhoon, hurricane, tsunami and forest fire.
- The rise in temperature draws water from land and water, causing drought and reduction in farm produce.
- Melting glaciers, reducing our source of fresh water.
- Food chain is severely disrupted from the fundamental level, the primary producer, causing massive death of ocean creatures due to starvation.
- Higher temperate affects human metabolism and promotes harmful bacterial growth, More kinds of sickness and chronic diseases have been overserved.
- The spread of virus and bacteria becomes harder to control in the event of severe climate with and extreme weather conditions, affecting human life.



淡水危机

Fresh water Crisis

定义：含盐量小于500mg /L的水是淡水

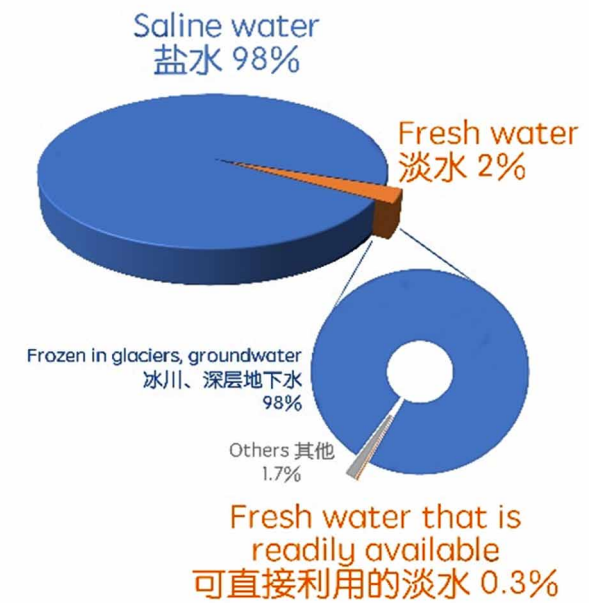
Definition: water with less than 500 parts per million (ppm) of dissolved salts

水是世界上最普遍的物质之一，**其中只有2%是淡水。淡水的87%又被封冻在两极及高山的冰层和冰川中，难以利用。**这些资源在时空上分布不均，加上人类的不合理利用，使世界上许多地区面临着严重的水资源危机。

Even though water is the most common substance on earth, **only 2% is consider fresh water. Amongst which, 87% is permanently frozen in the glaciers, ice and snow and not readily usable.** The uneven distribution of fresh water across the globe, worsened by human activities and wastage is causing serious water shortage in many parts of the world.

形成：人口增长、工业发展和畜牧业及灌溉农业的扩张是引起水需求增长的三个主要因素。在过去的三个世纪里，人类过量提取的淡水资源量增加了35倍。

Cause: The 3 fundamental causes are population growth, industrialisation and expansion of agriculture / livestock breeding. Our demand for fresh water now is 35 times of the consumption 3 centuries ago.



危害：

21世纪将是水的世纪，淡水资源紧缺问题引发高度警觉。到21世纪中叶，**世界上3/4 的人口将面临严重的淡水资源短缺。淡水短缺能够导致饥饿、疾病、社会不安定。**

Threat:

Human needs to be highly aware that we are already facing serious water shortage issue and **it is estimated that ¾ of the world population will have difficulty accessing fresh water supply by the mid of 21st century. Shortage of fresh water leads to serious health issue, famine and social instability.**

水已不是一种“取之不尽，用之不竭”的自然资源，人类赖以生存的淡水仅占地球水资源的百分之二。

Water is not exhaustless. The fresh water that our lives depend on, make up merely 2% of the global water supply.



感受

Feeling



有心的人们，感受到了地球传达给我们的信息。。。。

Those responsible people, they have felt Earth's feeling ...

全球每年塑料袋消耗量:5万亿

SPEED = 1600000/s

Per capita = 700

Area = 1540 Singapore

J.O.E 环保联盟在东海岸徒步捡垃圾时，巧遇了一群有着同样环保志向的学生，谈到了他们对社会现状和推动环保活动的感受。

When J.O.E Eco Alliance 'plogging' on the East Coast Beach, we met a group of young friends who also have the same ambition for environmental protection taking activities of environmental protection there as well. They shared with us their feeling and points of views on environmental protection and issues.

Q: 请介绍现在进行的环保活动

A: 我们把沙土填充到丢弃的塑料瓶里，然后做成一个精致舒适的座椅。计划把这些环保椅放置在东海岸不同的地方，供游人休息。我们现在正在公园邀请路人坐下来体验。希望可以提醒人们多关注环保。

Q: Regarding the activities they are taking

A: We filled the sand into discarded plastic bottles and made them chairs to put on the beach for people resting, now we are trying to invite people to experience it and hope it could helpful to remind people of protecting the environment.



Q: 除此之外还有其他的计划吗?

A: 我们第二个项目是制作一个海龟外型的垃圾桶，通过一个安装的太阳能板，当监测到人手时，垃圾桶会打开，便可以丢垃圾了。海龟的形状是为了让人们在丢垃圾的时候，对海龟遭受垃圾污染的痛苦感同身受。

Q: Any other plans besides these activities?

A: Our next plan is to make a trash bin looks like a sea turtle with a solar panel detector. When hands being detected, the bin to be opened then people can throw the trash. We hope to remind people of the pains that sea turtles are suffering when they have eaten the trash we made and threw into the sea and feel their feelings.

Q:你们设计这些作品和开展这样的活动初衷是什么?

A: 我们之前通过网络看到一些关于塑料污染的数据很受触动,比如,全球塑料袋每年消耗5万亿个,相当于每秒消耗16万个,人均消耗700个,这些塑料袋加在一起的面积相当于1540个新加坡面积。而且学校一直很重视环保教育,校内也有一些环保竞赛,比如自带饭盒,停止使用塑料打包盒,吸管等。A水准考试对我们有不同的项目要求,我们可以自己选择喜欢的主题,因为一直对环保有热情,也觉得非常有意义,所以才做这些的。我们都是地理专业的,以后读大学或是工作,也希望对环保做出贡献。年轻人是未来的希望!当志同道合的人相聚在一起,会碰撞出更多智慧的火花。这些年轻朋友非常开心地加入了J. O. E环保联盟,并表示非常愿意参与今后环保活动中!

维多利亚初级学院学生
Students from Victoria Junior College

东海岸公园
East Coast Park

Q: Why do you want to make chairs and such activities?

A: Because we once watched some reports and information regarding the plastic pollution and felt very sad. For example, 5 trillion plastic bags are consumed per year globally, equivalent to 160,000 per second and 700 per capita. The area of these bags together is equivalent to the area of 1,540 Singapore. And environmental protection is very important in our school, we also have some competitions such as bringing own lunch box to replace of foam meal box, refusing using straw etc. And we have always been passionate about environmental protection and feel it very meaningful, so we chose it for A Level project work. And our major is Geography, we also hope do something valuable and dedicate to the career of environmental protection when in universities or work.

Youth is the hope of future! When like-minded people get together, there will be more sparks of wisdom. These young friends are very happy to join the J.O.E. EO Alliance and world like to participate in more activities held by us.



气候变化, 温度升高, 海平面上升是新加坡面临的严峻的环境问题。应如何应对这样的问题, 为此我们采访了在环保领域具有几十年丰富经验的专业人士!

Singapore is facing three critical environmental issues including: changing climate, rising temperature and rising sea level. Regarding how to deal with the issues, we interviewed the professional who is with decades of experience in the field of environmental protection!

黄先生个人心路历程的回顾

曾在农业领域发展事业。工作之余, 20多年来一直投身于慈善和环保公益事业。特别是在基层的环保工作, 经验非常丰富。

Mr. Huang started his career in the agriculture. He has spend free time to fling himself to the charity, environmental protection and public welfare more than 20 years and has obtained abundant experiences at the community level.



新加坡环保资深人士黄拱华先生和夫人
Singapore Environmental Protection Veteran

对于“环境保护”的看法和建议

黄先生很认同我们的“环保需从心灵的源头治理”的理念。身心教育是起点, 让人们认识到欲望的危害, 才能逐步地转变观念。从心灵的转变, 到行动的转变, 再到环境的改变。

另外, 黄先生介绍了新加坡如何通过妥善处理垃圾, 逐步成为世界闻名的“城市花园”, 以及四大垃圾焚化厂(大士、胜诺哥、大士南和吉宝西格斯)和圣马高垃圾填埋场。恰恰因为已有的成果来之不易, 人们更有理由去珍惜, 并通过实际行动, 如减少不必要消耗、充分循环利用等方面, 去使我们的生存环境和家园更加美好。

Mr. Huang agrees with our philosophy that “environmental protection needs to be managed from the source of the mind”. People should be educated to change the mind first, only when mind changed, they could be able to aware the harm of the desire before taking any actions to protect environment.

In addition, Mr. Huang introduced the waste disposal process and related major contactors of Singapore (Tuas, Senoko, Tuas South and Keppel Seghers) and Pulau Semakau. Because the achievements of today are hard-won so that we should cherish them through practical actions, such as reducing unnecessary consumption and fully recycling, to make our living environment and home better.

淡水资源危机

黄先生介绍了“水立方”的概念：如果地球的水全部装进1000支宝特瓶内，盐水相当于975支，淡水只有25支，其中70%的17支在冰川和极地，这样仅剩的8支淡水中，有7支是地下水，最后只剩1支的地表水维持生命所需。**另外，制作我们喝的瓶装水，6瓶的水量才能生产出1瓶饮用水，而生产一个装水的宝特瓶则需要耗掉11瓶的水量，也就是说，我们饮用1瓶宝特瓶装水，需要消耗17瓶的水量。**

Freshwater crisis

Mr. Huang introduced us the concept of “Water Cube”: If all water of earth is filled into 1000 bottles, in which 975 bottles are salt water, and the fresh water are only 25 bottles, but 70% of the fresh water, which means 17 bottles, are in the glaciers and polar regions. Only 8 bottles of freshwater left, but 7/8 is groundwater, and only 1 bottle is the surface water for sustaining lives. **In addition, it needs to consume 6 bottles of water to produce 1 bottle of drinking water, but it consumes the water of 11 bottles to produce 1 PET bottle only, which means it needs the water of 17 bottles to produce 1 PET bottle of drinking water we buy in the market.**

How to deal with climate-changing issues and better carry out environmental protection activities

黄先生分享目前每年95%的塑料包装材料仍具有巨大的“再利用价值”，相当于800亿美元至1200亿美元；每3公吨被处理的垃圾可以生产相当于1公吨汽油或2公吨煤炭的能量！他建议应加大推广和提倡人们的“低碳环保”和“健康饮食”生活方式，分清欲望和需求，对于不是生活必需的物品，人们不去过多浪费。减少垃圾量，多循环利用旧物；多以素食为主，因为素食是环境保护非常有效和直接的方法。最后，黄先生欣然接受我们的邀请，愿意以“J. O. E环保联盟顾问”的身份，在今后的环保活动中给予支持和指导。

Mr. Huang shared that 95% of plastic packaging materials consumed per year still have huge reuse-value, the amount is equivalent to US\$80 billion to US\$120 billion; every 3 metric tons of treated waste can produce the energy equivalent to 1 metric ton of gasoline or 2 metric tons of coal.

He advocates the ‘low-carbon environmental protection’ and the ‘healthy eating’ lifestyles. People should distinguish difference between desires and needs. We should reduce those we don’t need and recycle more old things and should eat more plant-based food. Because vegetarian is a very effective and direct way to protect the environment. Finally, Mr. Huang is pleased to accept our invitation and is willing to support and provide guidance in the future activities regarding environmental protection as “J.O.E EO Alliance Consultant”.

5 R

环保承诺，
从我做起

REFUSE

REDUCE

REUSE

REPAIR

RECYCLE

*I make the first promise for
Environmental Protection*

行动 Action



行，始于足下；
动，才能改变。

We walk, start with the first step,
we do then we change...

政府层面的行动和举措 Government level response to climate change

新加坡把2018年列为“新加坡气候行动年”，鼓励所有企业、团体乃至每一名国人付诸行动，共同应对气候变化问题。

Singapore declared 2018 Year of Climate Action, promoting enterprises, social organisations and every resident to work together for a sustainable future.



Climate Action • 2018

Take Action Today, For A Sustainable Future
Reduce Our Carbon Footprint

Bertindak Untuk Iklim • 2018

Bertindak Sekarang, Untuk Masa Depan Yang Mampu

2018 • 气候行动

马上行动起来，共创永续未来

பருவநிலை செயல்திட்டம் • 2018

நீடித்து நிலைக்கத்தக்க வருங்காலத்திற்காக இன்றே செயற்படுங்கள்

1 Projections for Singapore

Potential climate change effects by 2100:

Unjuran Bagi Singapura
Kemungkinan kesan perubahan iklim menjelang 2100.

新加坡未来预测
新加坡可能面临以下气候变化预测：

சிங்களப்பகுக்கான
கணிப்பீடுகள்
பருவநிலை மாற்றத்தால்
2100-ஆம் ஆண்டில்
ஒருக்கூடிய
பரிந்துரைகள்

Daily temperatures could rise by 1.4°C to 4.6°C
Suhu harian boleh naik sebanyak 1.4°C hingga 4.6°C
日平均气温可能上升1.4°C至4.6°C
தினசரி சராசரி வெப்பநிலை 1.4°C முதல் 4.6°C வரை உயரக்கூடும்

Wet months likely to be wetter and dry months drier. More intense and frequent heavy rainfall.
Musim hujan mungkin mengalami lebih banyak hujan dan musim panas mungkin bertambah panas. Hujan turun amat lebat dan lebih kerap.
雨季变得更潮湿，夏季变得更干燥。降雨量也会增加和变得更频繁。
மழைக்காலத்தில் அதிக மழை பெய்யும் வெப்பமான காலங்களில் வெயில் கடும்படும். அடுத்த ஆகஸ்டு கனத்த மழை பெய்யும்

Mean sea levels could rise by up to 1 metre
Paras laut purata mungkin naik sehingga 1 meter
平均海平面可能上升1米之多
சராசரி கடல் மட்டம் 1 மீட்டர் வரை உயரக்கூடும்

3 Everyone Plays A Part

Setiap Orang Memainkan Peranan
人人有责
ஒவ்வொருவருக்கும் பங்குண்டு

Reduce waste and use of water and energy
Kurangkan sisa dan penggunaan air dan tenaga
減少浪費，節約用水和能源
குறைவாகக் குடிபோவதையும் குறைவாகக் கழிப்பதையும் குறைத்துக் கொள்ளுங்கள்

Smaller carbon footprint
Jejak karbon yang lebih kecil
減少碳足跡
குறைவாகக் கரியமிலவாயு பதிக்

Fight climate change
Melawan perubahan iklim
应对气候变化
பருவநிலை மாற்றத்தை எதிர்த்து போராடுங்கள்

4 Simple Actions You Can Take

Tindakan-tindakan Mudah Yang Anda Boleh Lakukan
气候行动，从小事做起
நீங்கள் செய்யக்கூடிய எளிதான செயல்கள்

Switch off after use
Tutup suis selepas digunakan
用完即关闭电源
பயன்படுத்திய பிறகு சுவை அடைத்துக்கொள்ளுங்கள்

Set air conditioner at 25°C
Tetapkan suhu penyaman udara pada 25°C
將冷氣溫度設定為 25°C
குளிர்சாதனத்தை 25°C எனத் திடுக்கிட்டுங்கள்

Choose energy-efficient appliances with more ticks
Pilih peralatan cekap tenaga yang ada lebih tanda semak
選擇較多勾号的节能电器
விசைகளில் அதிகமான குறிகைகளுக்கும், குறைந்த வெப்பநிலை, குறைந்த எரிசக்தியைப் தேவைப்படுகின்ற

5 Take Action Today

Pledge, Share, Join
Bertindak Sekarang
Beriklan, Beriklan, Meyoriti
马上行动起来
承諾，分享，加入
இன்றே செயல்படுங்கள்
உறுதிபடுத்தி எடுங்கள்
பங்கேற்பு செய்வதில்
தொகுங்கள்

Pledge to take climate action at www.mewr.gov.sg/climateaction
Beriklan untuk melakukan tindakan iklim di www.mewr.gov.sg/climateaction
承諾加入气候行动：
www.mewr.gov.sg/climateaction
பருவநிலை செயல்திட்டம் தொடக்கம். உறுதிப்படுத்தி செயல்படுங்கள்

Share your #ClimateActionSG stories
Beriklan cerita #ClimateActionSG anda
分享你的 #ClimateActionSG 气候行动故事
உங்கள் பருவநிலை செயல்திட்டம் #ClimateActionSG-ஐ பங்கிட்டு கொள்ளுங்கள்

Join or organise climate action activities
Beriklan atau angkutan kegiatan tindakan iklim
加入或组织气候行动活动
பருவநிலை செயல்திட்டம் நடவடிக்கைகளில் பங்கேற்குங்கள். அல்லது ஏற்பாடு செய்யுங்கள்

Find out more at cgs.sg

Clean & Green Singapore

Sustainable Singapore CLIMATE ACTION • 2018

政府层面的行动和举措

Government level response to climate change

英国女王已下令，禁止在王室产业内使用塑料吸管和塑料瓶。

The Queen of England bans plastic straws and bottles on royal estates.



联合国报告指出，至今全球已生产90亿公吨的塑料，但当中仅有不到10%被再循环使用。联合国呼吁全球禁用或对即丢塑料制品征税。

Reports by United Nation states that 9 billion tons of plastic product have been produced since introduction, of which, only less than 10% is recycle. The UN urges for a global ban of single use plastic products and consumption tax.

从今年 7 月 1 日起，澳大利亚昆士兰州政府将开始禁止提供一次性轻型塑料购物袋。该禁令将适用于所有零售商，包括超市、蔬菜水果店、面包店、药房、服装店和餐饮店。

From 1 July 2018, Australian's Queensland government has introduced a ban on plastic shopping bag among all retailers.



2018年8月10日，刚刚休完产假不久的阿德恩在国会发表演说，宣布新西兰将禁用一次性塑胶袋。

On 10 Aug 2018, Prime Minister of New Zealand, Jacinda Ardern, announced the country will ban plastic bags over the next year.



企业层面的行动和举措

Enterprise level response to climate change



图1:老北京食堂已经不在店内提供塑料吸管;同时,纸巾和包装盒使用的是可迅速降解的环保材料产品。

Lao Beijing is no longer providing its patrons with plastic straws. At the same time, replacing serviette and take-away package to biodegradable ones.

图3:星巴克公司宣将于2020年之前在全球范围停止使用塑料吸管。

Starbucks to eliminate plastic straws globally by 2020.

* 以上信息是基于对诺威娜广场的企业调查取得
Survey from restaurants at Novena Square



图2:RealFood正是基于低碳生活、环境保护和健康饮食的理念,而成立的素食餐厅,推广健康素食饮食和文化。

RealFood, a vegetarian restaurant start-up, promotes a healthy and low-carbon lifestyle through dishes prepared with food that is sourced from environmentally sustainable origins.

图4:麦当劳将于 2018 年末全面淘汰泡沫包装并于 2020 年全面使用可回收纤维作为包装原材料。

McDonald's to phase out form packaging worldwide from end of 2018 and start to adopt to 100% certified recycled packaging form 2020.

2018年，我们在行动！

2018, We are in Actions!

2018年，我们在行动！

2018, We are in Actions!

心灵的环保先行于环境的保护，当人可以辨明自我的欲望和需求时，会由内而外的改变。通过参观文化博物馆，在感叹前人今天所取得的成果时，通过回顾前人一点一滴走来的艰辛，不断在思考今后我们应该努力的方向：

Purification of mind should be anterior to Environmental Protection. Only when people aware and recognize the difference between 'desire' and 'need', they will change internally from mind. We reviewed and praised the achievements in history made by those seniors by visiting the museum of humanism while thought about how we should do better in the future.



环保主题读书会
Reading party



办公室垃圾分类角
Waste sorting corner

- 参访环保教育机构
Visited Eco Awareness Center.
- 邀约“邻居企业”加入环保联盟，宣导和提升企业和职员对环保的知识和意识。
Invited companies at Novena Square to join in J.O.E Eco Alliance.
- 举办“徒步捡垃圾”活动。
Plogging activities.
- 宣传环保知识读书会。
Reading party for Environmental Protection
- 打造“绿色办公室”，设立垃圾分类角。
Green office activities
- 分类后垃圾统一环保回收。
Sorted waste collection activity.
- 集体承诺拒绝使用一次性的吸管，拒绝使用塑料袋。
Refuse straw and plastic bags.
- 自备用餐饭盒及碗筷。
Bring own lunch box to replace foam box.
- 循环使用纸张。
Recycle paper.



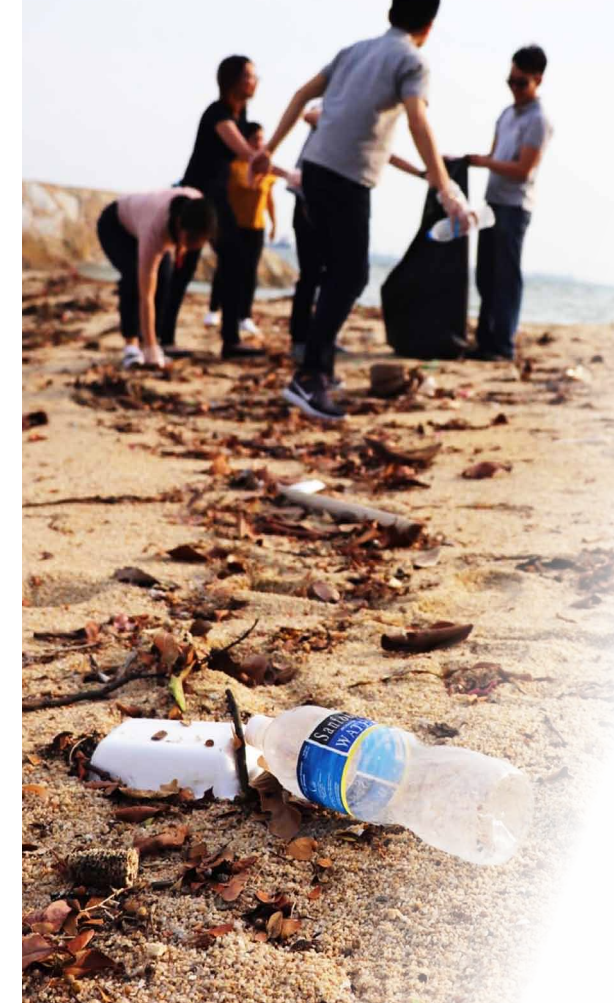
参访人文博物馆
Visiting museum of humanism



办公室内的文化和环保宣导角

Culture and Environmental Protection Corner in office

东海岸海边
Beach at East Coast



“徒步捡垃圾”是公司定期举办的活动。不仅仅是公司内部，更多抱有对环保事业热诚的企业和机构也被邀请一起来参与。这种行动不仅仅增进了彼此友谊，也凝聚了团队的向心力，也让大家更好体验到实践“环保”的乐趣和意义。

We organize the activity of 'Plogging' regularly for staffs and also invite other companies to join in. The activities enhance the friendship among people and centripetal force and make people experience the joy and meaningfulness when participating in environmental protection activities.



时事

Updates



因环境问题，地球每天都在发生。。。

What happen to Earth everyday because of
Environmental Issues..

Updates



2018年5月，由于非正常温度导致印度西部和北部的尘暴灾害，大批民宅和基础设施被毁，死亡人数达到120多人。

May 2018, the unusual high temperature caused drought and sand storm in western and northern India. Many becomes homeless as towns are destroyed, more than 120 people died.



2018年7月，老挝南部水坝崩塌，泛滥洪水跨境涌入邻国柬埔寨，迫使成千上万的柬埔寨人紧急疏散。

Jul 2018, Laos dam collapse sends floods into Cambodia, forcing thousands to flee.



2018年8月，夏威夷遭受飓风侵袭，随后大雨导致洪涝灾害，致使数以百计的人们流离失所。

Aug 2018, Hawaii was attacked by hurricane resulting in flood disasters.



2018年7月，日本西南部大暴雨导致洪灾和塌方灾害发生。致使200万民众失去家园。动用7000多赈灾人员实施抗灾。

Jul 2018, typhoon hits western Japan, followed by heavy rain and landslide. More than 2 million people lost their home, at least 7000 relief workers were involved in the rescue work.



台湾于2018年8月下旬因为持续暴雨而发生的天灾事件，并在西南气流影响台湾之前提醒民众会有坍方、落石、土石流、山洪暴发及淹水发生。

Aug 2018, unprecedented rainfall caused severe flood in southern Taiwan.



2018年9月，25年来最强台风燕子登录日本，已造成至少10人死亡。

Sep 2018, Jebi, Japan's most powerful storm in 25 years, has killed at least 10 people.

呼吁

Advocate



让我们携手前行，永远走在保护地球、
保护人类的希望之路上。

Let's hand in hand, walk together on the road of
Hope protecting earth and human-being forever!

我们在路上，将勇往直前！
We keep on going bravely!

- J.O.E 环保联盟正式成立
Official launch of J.O.E Eco Alliance
- “5R” 推广活动
‘5R’ Promotion
- 办公区域回收垃圾分类宣传活动
Sorting waste and Environmental Protection promotion in office building
- 社区环保垃圾分类活动
Sorting waste at Community Center
- “徒步捡垃圾” 活动
‘Plogging’ activities
- 以“环境保护”和“可持续发展”为主题的读书会
Reading party of ‘Environmental Protection’ and
‘Sustainable Development’ themes
- 世界企业续存发展主题的讲座、演讲
Lectures for world enterprises sustainable development
- 环保主题的艺术设计展、摄影展活动
Environmental Protection theme exhibitions of Art and Photography



您的加入 就是对环保最大的支持

YOUR PARTICIPATION IS GREATEST SUPPORT TO
ENVIRONMENTAL PROTECTION

J.O.E 环保联盟
J.O.E Eco Alliance

欢迎任何企业及个人加入J.O.E环保联盟；任何环保主题文章或摄影作品欢迎投稿至：
Any organizations or individuals are welcome to join in J.O.E Eco Alliance and any articles or photographs related to Environmental Protection please send to:

joe.ecoalliance@gmail.com

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