



# “Pivoting Public, Private and People (3P) Transition to a Low Carbon Future”

(Creating a Blueprint for a Carbon Neutral City to Tackle Climate Change)

“推動 3P 轉型，邁向低碳未來”

Isabella Huang Loh 羅惠嬌 主席

29 March 2024

## Agenda 議程

- Introduction to Singapore's Climate Commitments 新加坡氣候承諾介紹
- Sustainable Public Procurement (SPP) 永續公共採購 (SPP)
- The Role of the Singapore Environment Council 新加坡環境理事會的角色
- International Collaboration and Learning 國際合作與學習

# Singapore Environment Council – Vision, Mission

## OUR VISION AND MISSION

Established 1995

NGO and approved charity, offering tax exemption to donors

### OUR VISION

To be a trusted leader in environmental sustainability

我們的願景是成為環境永續發展領域值得信賴的領導者

### OUR MISSION

To foster lasting environmental and societal values that encourage and achieve environmental sustainability by:

- + Collaborating with people, industries and governments
- + Setting sustainability standards for green consumerism
- + Educating and empowering communities to lead green lifestyles
- + Promoting biodiversity in the urban environment
- + Recognising environmental excellence by individuals and organisations



Accredited in 2018



Board Member of Global Ecolabelling Network (GEN)



IGPN



ISO 17065:2012  
ISO 14064-3:2019

Globally recognised over 80 countries



## Pillars 9 UN SDG(s)

## 新加坡環境理事會 – 願景、使命

### Driving Awareness of Sustainability Issues

Educating and empowering communities to lead green lifestyles through our Training & Education initiatives.

提高人們對永續發展議題的認識



### Empowering Business and Consumer Action

Setting sustainability standards for green consumerism through the Singapore Green Label and Eco-Certifications.

賦能企業與消費者行動



### Fostering Strategic 3P Collaborations

Collaborating with people, industries and governments through our Campaigns and Outreach initiatives.

促進公共、私營、民眾(3P)策略合作



# Singapore's National Determined Contributions (NDC) and Commitment to Climate Change 新加坡的國家自定貢獻 (NDC) 和對氣候變化的承諾

2050 年實現淨零排放

**Achieve net zero emissions by 2050**  
Long-Term Low-Emissions Development Strategy (LEDS)

**Reduce 2030 emissions to 60 MtCO<sub>2</sub>e after peaking emissions earlier**  
2030 Nationally Determined Contribution (NDC)

2030 年將排放量降至約 6 千萬噸二氧化碳當量

## Accelerating Low-Carbon Transition in Industry, Economy and Society

加速產業、經濟、社會  
低碳轉型

### Catalyse business transformation

- Sustainable energy and chemicals hub in conjunction with industry
- Grants for energy efficiency and emissions reduction

### Invest in low-carbon technologies

- Carbon Capture Utilisation and Storage
- Low-carbon hydrogen
- Solar and energy storage systems

### Pursue effective international cooperation

- International carbon markets with high quality carbon credits
- Regional power grids for green energy

### Adopt low-carbon practices

- Green commutes via public transport, Walk-Cycle-Ride & cleaner energy vehicles

1. 促進業務轉型
2. 投資低碳技術
3. 尋求有效的國際合作
4. 採取低碳實踐



**KEY ENABLER**

Right-pricing carbon to shape business decisions and consumer behaviour

Carbon tax  
S\$50-80/tCO<sub>2</sub>e  
by 2030

**EVERYONE CAN PLAY A PART**

#### Public sector

Achieve net zero emissions across public sector around 2045 as part of GreenGov.SG



#### Private sector

Develop and adopt low-carbon solutions, and pursue green growth opportunities



#### Individuals

Contribute to climate friendly initiatives



關鍵推動因素：  
碳稅  
到 2030 年，每噸二氧化碳當量將達到 50-80 新元

公共、私營、民眾

# Singapore Mega Projects 2024 新加坡2024大型項目



Jurong Lake District-2030



North Coast Innovation Corridor-2030  
R&D Center



Greater Southern Waterfront-2040



Singapore-China Guangzhou-Shenzhen Maglev Link-2027



Punggol Digital District-2030

# Singapore Mega Projects - Jurong Island Net Zero 2050

裕廊島 2050 年淨零排放

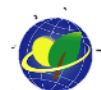


# UNEP Sustainable Public Procurement (SPP)

## 聯合國環境署永續公共採購 ( SPP )



17065



IGPN

- GEN member since 2011 自 2011 年起成為 GEN 成員
- Endorsed amongst 30 member countries worldwide 獲得全球 30 個成員國的認可
- ISO certification provides assurance ISO 認證提供保證

- Global expenditure on procurement is estimated at **\$9.5 Trillion USD annually.**
- Public procurement accounts for **14% of EU GDP.**
- SDG indicator 12.7.1: sustainable public procurement is necessary to achieve the SDG 12: Responsible Consumption and Production.
- Government purchasing power should be leveraged to buy the most sustainable products– the potential impact of SPP is significant, and an important lever to shift entire industries.

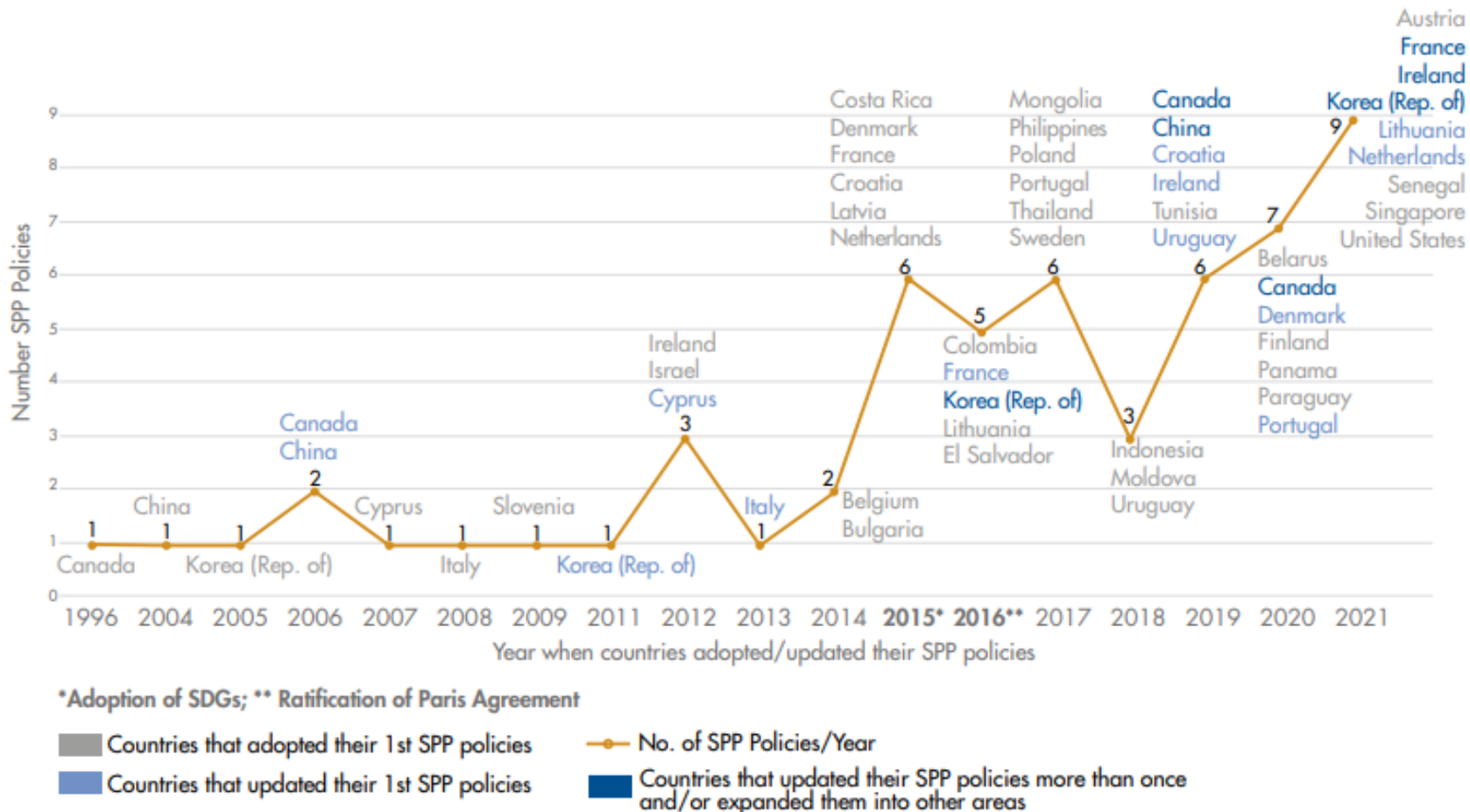
### **Sustainable Public Procurement Will Remain a Key Priority for GEN in 2024.**

- Sustainable Purchasing Leadership Council
- Development Banks- focus on SPP

# SPP is Building Momentum – Policy Framework SPP 正在積蓄動力——政策框架

Since 2015, there has been a significant increase in the development of policies and legal instruments supporting SSP around the world.

**Figure i. Adoption of SP policies among participating national governments**



自2015年以來，全球支持SSP的政策和法律文件的製定顯著增加。

Source: 2017 SPP Global Review and 2021 SPP Global Review National Government Questionnaire.



# Sustainable Public Procurement (SPP) 永續公共採購 ( SPP )

Key actors have **increased the use of Sustainable Public Procurement (SPP) and Type-1 Ecolabels** as tools to **improve climate mitigation, biodiversity, and resource protection**, through ambitious ecolabels, improved policy and legal frameworks, increased engagement of the private sector, as well as regional and global exchange.

## Output I: Ambitious Ecolabels

Type -1 ecolabels with ambitious criteria have been developed or strengthened  
(UNEP)

## Output II: Policy & Legal Frameworks

Policy and legal frameworks for Type-1 ecolabels and sustainable public procurement, are strengthened in target countries  
(GIZ)

## Output III: Supply and Demand

Supply and demand for Type-1 ecolabelled products in target countries have increased.  
(GIZ)

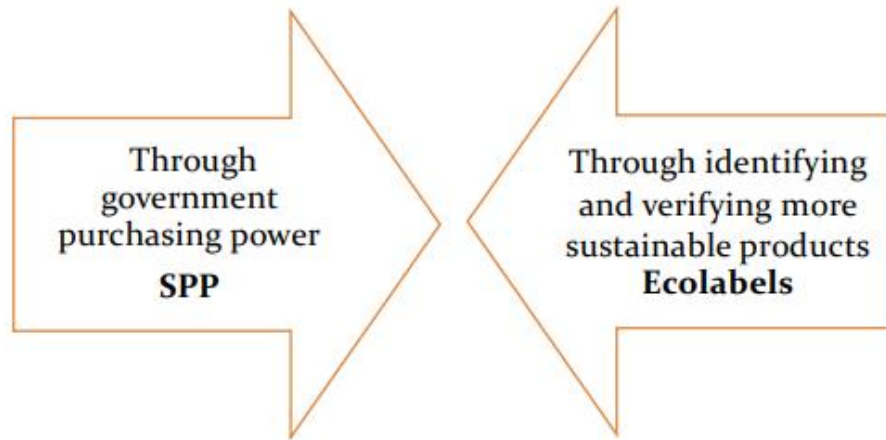
## Output IV: Global Exchange





Global and regional knowledge exchange on SPP and Type-1 ecolabels are increased  
(UNEP)

# Ecolabelling are Used in the Elaboration of SPP Specifications

## 生態標章用於制定 SPP 規範

Combining SPP and Ecolabelling to stimulate the demand and supply of sustainable products



Links Between SPP Criteria and Ecolabels in Asian Policies		
Country	Link of the SPP criteria to the national ecolabels	Type I Ecolabel
China	✓ Direct in the regulation, products must be certified with the China Environmental Label	
Singapore	✓ Direct in the regulation, products must be certified by SEC and GreenGov.SG. Companies are eligible to secure green loans upon acquiring eco-labels and may also receive grants for obtaining certifications.	 
Korea	✓ Direct in the Act, prod/serv must be certified or meet the criteria of Korea Eco-label, Good Recycled Mark or others set by the MoE	

# International Green Purchasing Network (IGPN) Overview

## 國際綠色採購網 (IGPN) 概述



Promotes green purchasing around the globe by coordinating those who take the initiative in implementing green purchasing towards sustainable consumption and production



### Mission

- Promote globally the development of **Environmentally friendly products and services and Green Purchasing** activities;
- Share information and know-how on **Green Purchasing and environmentally friendly products and services** internationally;
- Harmonize the efforts of **Green Purchasing and the development of environmentally friendly products and services** from a global viewpoint.

- ✘ Partners with **Global Lead City Network (GLCN)** on sustainable procurement, members with **Global Ecolabel Network (GEN)**, collaborates with the **Sustainable Public Procurement(SPP) Programme** of UNEP One Planet Network, support UN SDG 12: Ensure sustainable consumption and production patterns.
- ✘ Members from countries such as *China, Japan, Korea, Thailand, Malaysia, Singapore, the Philippines, India, Vietnam* etc., and regions such as *China Hong Kong SAR, and Chinese Taipei*.

# Enabling SPP Adoption Through GreenGov.SG (SEC's SGLS & Eco-Certifications)

## 透過生態認證和綠色DNA促進綠色採購的採用



**Building Products**  
 Cement and Precast Concrete  
 Brick  
 Tile /Ceramics  
 Paints and Surface Coatings  
 Carpets  
 Adhesives and Sealants  
 Panel Board  
 Surface Covering  
 Insulators  
 Textiles  
 Flooring  
 Pipes  
 Doors



**Office Supplies & Equipment**  
 Paper  
 Correction Fluid and Tapes  
 Copying, Fax machines, Printers and Multi-Functional Devices  
 Office Furniture  
 Ink and Toner Cartridges  
 Laptop  
 Monitor  
 Projector  
 Compact Fluorescent Lamp (Modular)  
 LED Lights



**Personal Care**  
 Hair spray/Gel/Mousse  
 Deodorant Stick/Roller/Spray  
 Shaving Foam & Cream  
 Cosmetics  
 Sanitizer  
 Face Mask



**Household Appliances**  
 Food Packaging, Crockery and Cutlery  
 Dishwashers  
 Electric Kettles  
 Espresso & Coffee Machines  
 Gas Cookers and Gas-Fired Appliances  
 Hot Water Storage Tanks  
 Oxo-biodegradable plastic products  
 Oven  
 Microwave



**Cleaning Products**  
 Detergents  
 Floor Cleaners  
 Industrial and Institutional Cleaner  
 Surface Cleaners  
 Hand Soaps



**Others**  
 Soil Improver, Growing Media, Aggregate & Mulch  
 Product made from Recycled and or sustainable content  
 Products with recycled and or sustainable content  
 Biodegradable Products  
 Environmental Innovative Products  
 Fire Extinguishers  
 Automobile Tyres  
 Termiticides  
 Eco-friendly products  
 Hand Driers

# Singapore's Aspirations Infused into the SG Green Plan 2030

## 新加坡綠色計畫 2030

- Singapore as a transshipment hub & global trading hub, savvy in international standards, living up to the name  
新加坡作為轉運中心和全球貿易中心，精通國際標準
- Singapore as a centre for global arbitration (including green) for agreements  
新加坡作為協議仲裁中心
- 3P – People Public Private 公共、私營、民眾
- 3E – Engage Enable Evolve 參與、促進、發展



# SEC Enabling Green Agenda in tandem with Singapore Green Plan 2030

## SEC 與新加坡綠色計劃 2030 同步實施綠色議程

### Five Pillars of the Green Plan



**City In Nature**  
自然之城



**Energy Reset**  
能源重置



**Sustainable Living**  
永續生活



**Green Economy**  
綠色經濟



**Resilient Future**  
彈性未來

### Spearheaded By Five Ministries



Ministry of Sustainability  
and the Environment  
— SINGAPORE —



Ministry of Education  
SINGAPORE



### SEC's Green Agenda

**1. Green Buildings**  
綠建築

**2. Clean Energy**  
清潔能源

**3. Adoption of  
Green Products**  
綠色產品

**4. Sustainable  
Procurement**  
永續採購

**5. Digital Green  
Passport**  
數位護照

# SEC Strategic Initiatives SEC策略性舉措

**SEC driving meaningful transformations and cultivating global partnerships**

SEC推動有意義的轉型並培養全球合作夥伴關係

Regional and global expansions through Green Economy Agreements, growing bridges



Members of IPEF	
Type	Economic initiative
Membership	14 countries <a href="#">[show]</a>
Establishment	23 May 2022



**SEC's mission as a council to establish collaborations with social enterprises and the people sector**

SEC的使命是與社會企業和民眾建立合作

Leading the way in expanding international green markets for environmentally conscious businesses for enabling communities



# SEC Strategy Aligns with Green Future

## SEC 策略與綠色未來保持一致



### Certiably Green 綠色認證

*Green standards and certifications will change the competitive landscape of industries and the players within them.*



### The Green Seeds of Innovation 創新的綠色種子

*The desire to go Green forces companies to reinvent products, services, and business models in new ways.  
(eg. Carbon tax, Packaging Legislation)*



### The Greenest Link – Digitalisation, AI, Blockchain 數位化

*Minimising Environmental Impact across a product lifecycle from development to disposal and beyond using technology*



### Green Goes Collaborative (3Ps) 綠色協作

*Collaboration between the public, private, people and NGOs is key to achieving global and local emissions targets.*



Source: Future of Green Business Strategy, Future Think LLC

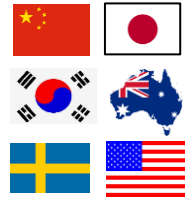


# Role of Singapore Environment Council (SEC) - Public

## 新加坡環境理事會 (SEC) 的角色 - 公共

### International MRAs & MOUs

- China CEC (2014)
- Japan Eco-Mark (2015)
- Korea Eco-Label (2018-2019)
- Australia GECA (2022)
- TCO Certified (2023)
- EPEAT (2024)



國際諒解  
備忘錄和  
互認協議



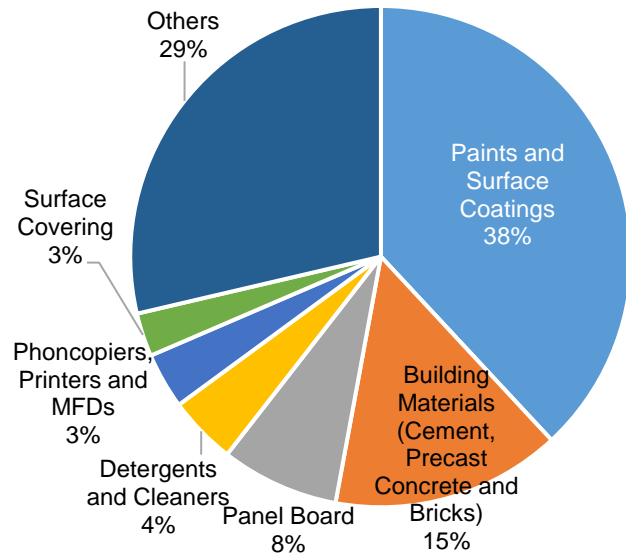
Green Label



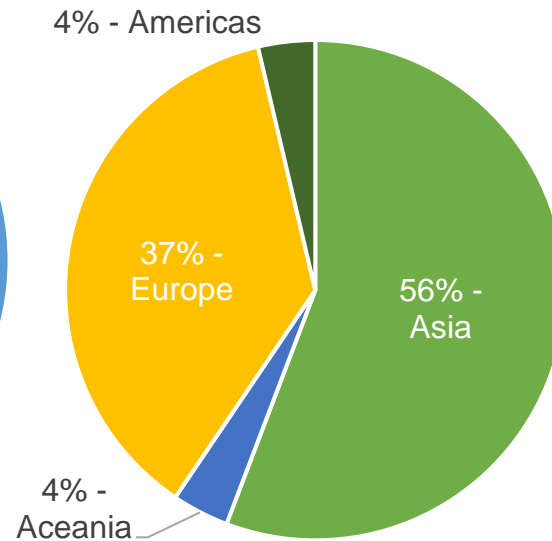
Green Label Plus

綠色標籤

### Product Penetration 產品滲透率



### Country Coverage 國家覆蓋範圍



### Coverage

- 74 product categories
- 4,000 products certified
- 800 companies
- 50 countries



### The MyHijau Mark

Denoting compliance to global environmental standards, the MyHijau Mark is a consolidation of regional and international green certifications.



# Role of Singapore Environment Council (SEC) - Public

## 新加坡環境理事會 ( SEC ) 的角色 - 公共

### INDUSTRY DEVELOPMENT

### 產業發展

Green Industries to spur Green Recovery  
(Circular Economy & Digitalization)

- **Build 30 X 30 Food Resilience**  
建立糧食彈性  
**Clean & Green** standards; high-tech farming; scale **technologies**; **accelerate** food production
- **Packaging Circular Economy**  
包裝循環經濟  
**EPR by 2025** - new ecosystem for product/packaging **design innovation**; waste reduction
- **Sustainable Tourism MICE, Hospitality**  
永續旅遊  
promote **resource circularity**; **reduce/recycle** food & packaging waste
- **Sustainable Manufacturing 永續製造**  
**de-carbonize**, reduce environmental impact in supply chains; **Digitalize**

# Role of Singapore Environment Council (SEC) - Private

## 新加坡環境理事會 (SEC) 的角色 - 私營

New Economy Industry Opportunities

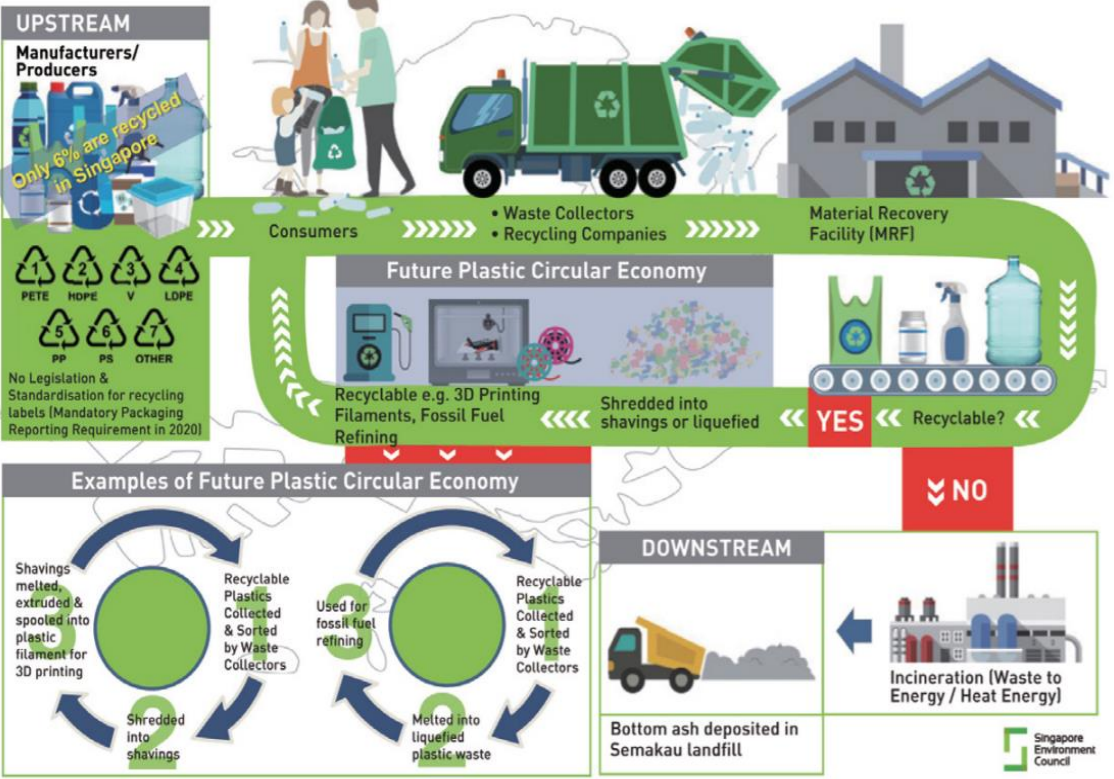
### Waste to Biofuel



### Waste to Value (new products)



### Plastic Extrusion Vendors



### Infrastructure 基礎設施

- Standardisation of Recycling
- Integrated Waste Management System (sorting and recycling at waste-to-energy site)
- 'Karang' Guni' (Collectors)

### Policy 政策

- Step-wise elimination of single-use plastics
- Labeling of plastics
- Compulsory recycling at commercial facilities

### Campaign 活動

- Raise awareness on types of recyclables, recycling methods
- Replace Single-Use Plastic Bags/Rolls with Alternatives

### Innovation 創新

- Build Market for Recycled Plastic
- Create New Industries (\$500M)

Source: <https://www.freepik.com/> & <https://www.vecteezy.com/>

# Role of Singapore Environment Council (SEC) – SG People

## 新加坡環境理事會 (SEC) 的角色 - 民眾



### 綠色社區 Green Communities

- Launch of **biodiversity and eco trails** for environmental awareness
- Drive the **adoption of green label products and eco-certifications** in homes and offices
- Lead people and communities to adopt **sustainable consumption practices/habits** and contribute to environmental programmes.

#### Sustainable Living

永續生活



#### City In Nature

自然之城

aramco



Ministry of Sustainability  
and the Environment  
SINGAPORE



### 綠色家園 Green Homes



- Working with Northwest CDC to **promote Green Homes** by providing **incentives** to home-owners who buy energy-efficient home appliances eg, TV.
- Exploring **Solar Energy Program** with Sembcorp and their manufacturer to make HDBs more energy efficient.

#### Energy Reset

能源重置



People's Association

#### Sustainable Living

永續生活



NORTHWEST  
COMMUNITY DEVELOPMENT COUNCIL

Proprietary Information of Singapore Environment Council

新加坡環境理事會的專有訊息



### Green Schools

綠色學校

- Annual **School Green Awards** – incorporate 2030 Green Plan themes towards carbon neutral outcomes.
- Education on sustainability through **learning journeys and workshops**.
- Aligning with 4 'C's of **Eco Stewardship Program**. (**Curriculum, Campus, Culture, Community**)
- Embark on **waste reduction initiatives** such as Coca Cola & Epson projects with IHLs.



Ministry of Education  
SINGAPORE

#### Sustainable Living

永續生活



REPUBLIC  
POLYTECHNIC

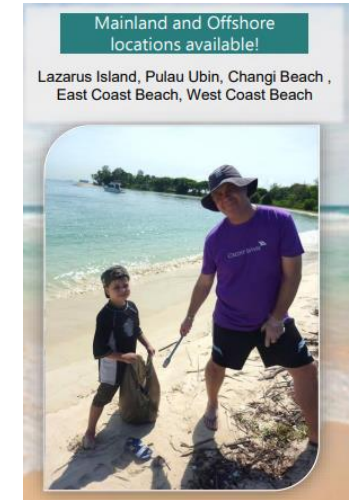
SINGAPORE  
POLYTECHNIC

SP

Temasek  
POLYTECHNIC

# Role of Singapore Environment Council (SEC) – Asia People

## 新加坡環境理事會 (SEC) 的角色 - 民眾

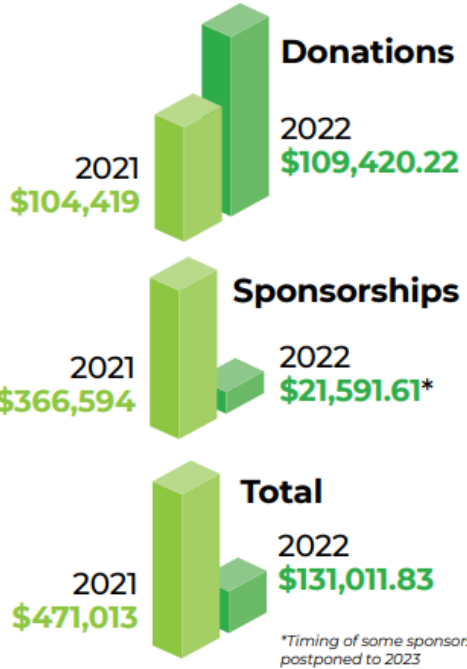


- Coral Planting 珊瑚種植
- River Cleaning 河道清理
- Coastal Cleaning 海岸清潔
- Blue Label for Oceans & Rivers 海洋和河流藍色標籤

- Sponsor or Donate-a-Trail, Workshop, Event etc. 贊助或捐款路線、研討會、活動
- School Green Awards (SGA) 綠色學校獎
- Singapore Environment Achievement Awards (SEAA) 新加坡環境成就獎

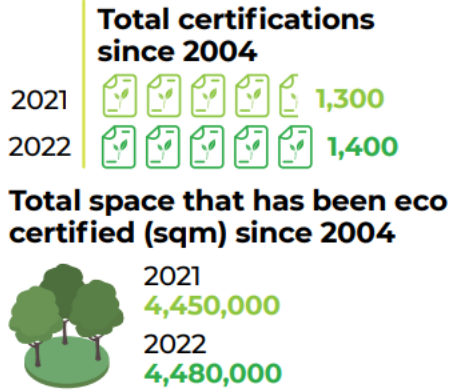
# SEC Key Accomplishments 2022

## SEC 2022 年主要成就



Average growth rate 4.4 % since 2017

### Eco Establishments



### Outreach - Number of People



**~1,500** certified premises (since 2002)

### Singapore Green Labelling Scheme (SGLS)



### No. of Companies



### Training and Education

#### No. of Activities Held



#### No. of Corporates Reached



\*The Green Learning Journey was not conducted by SEC in 2022

### SGLS+ for Pulp and Paper



### No. of Companies



### GreenDNA

#### No. of Organisations (Cumulative)



#### No. of Certifications (Cumulative)



### Earth Helpers



**~1,000** Earth Helpers (since 2002)

### Community Outreach



### School Green Awards (SGA)

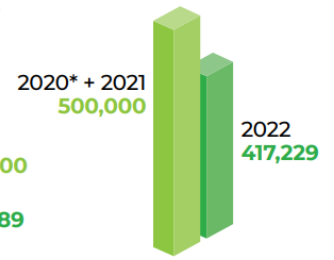
#### No. of Submissions



#### No. of Students Reached



#### Total Outreach



\*No SGA in 2020 due to COVID-19



# International Collaboration and Learning 國際合作與學習



CEC-SEC



MOU for Sustainable IT products



Collaboration with Australia GECA



MRA with Japan Eco-Mark

## Concluding Remarks 結束語

- We Welcome Collaborative Efforts for Sustainability with Other Countries 歡迎其他國家和我們合作推動永續發展
- Empowering a Sustainable Future 賦能可持續的未來





# THANK YOU 謝謝

## Contact SEC Secretariat 聯絡 SEC 秘書處



Cheang Kok Chung  
Executive Director  
[kc.cheang@sec.org.sg](mailto:kc.cheang@sec.org.sg)  
Mobile +65 9682 4588



William Wong  
Assistant Executive Director  
Director, Business Development & Partnerships  
[william.wong@sec.org.sg](mailto:william.wong@sec.org.sg)  
Mobile +65 9782 6386



Xu Jianxiong  
Senior Environmental Engineer  
Sustainability Partner  
[jianxiong.xu@sec.org.sg](mailto:jianxiong.xu@sec.org.sg)  
Mobile +65 9861 8886



Lauren Ang  
Sustainability Partner  
[lauren.ang@sec.org.sg](mailto:lauren.ang@sec.org.sg)  
Mobile +65 9651 4652