

SUSTAINABILITY

WATER SUSTAINABILITY: 20TH ANNIVERSARY OF SSMC'S USAGE OF NEWATER

SSMC is the first wafer fab to use 100% NEWater and also the first to receive the Singapore President Award under the Environment category in 2015. April 2022 marked the 20th anniversary of SSMC's usage of NEWater, a high grade reclaimed water produced by Singapore's Public Utilities Board (PUB). The NEWater is used mainly in wafer fabrication plants, industrial estates and commercial buildings. Over the years, SSMC has strived hard to make water sustainability a top priority. SSMC is well recognised by local government agencies and international media, achieving water sustainability awards throughout the years.



COMMISSIONING UPW PRODUCTION PLANTS

WATER SEGREGATION
Adopting technologies like filtration and reverse osmosis

2000

WEB GOLD 2013

INVESTING IN WATER RECYCLING PLANTS

1ST WAFER FAB
in Singapore to use 100% newater in production

2002

WATERMARK AWARD 2013

INSTALLING A LOCAL SCRUBBER REUSE SYSTEM

3R'S INITIATIVE
Reusing wet bench discharge waste, optimizing wet bench flow rates

2012

PRESIDENT'S AWARD (ENVIRONMENT) 2015

CONSTRUCTION OF NEW HF TREATMENT PLANT

ULTRAPURE HF SEGREGATION
Reclaiming the water for UPW inlet

2015

1ST IN THE WORLD TO OBTAIN ISO 46001: 2019

AS OF 2022:

71% ↑

WATER RECYCLE RATE (HIGHEST IN INDUSTRY)

400

OLYMPIC SWIMMING POOLS OF WATER SAVED ANNUALLY

EVERY DROP OF NEWATER IS RECYCLED 2.5 TIMES

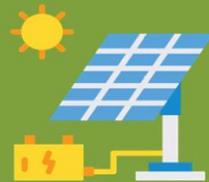


SUSTAINABILITY

ADOPT "BEST FROM THE BEST"

SSMC strive to be a global role model in sustainability together with our NXP and TSMC partner. We developed our Eco Vision sustainability programmes and green manufacturing technologies to broaden our environmental conservation and preservation efforts.

SSMC CLIMATE ACTIONS FEATURED IN THE SSIA VOICE MAGAZINE



SOLAR ENERGY

- 5,000 solar panels,
- 1.5 football fields
- 2000 MWh/Yr harvest
- 400 households (4rm HDB) power supply /Yr
- Reduce carbon footprint by > 800,000kg



ENERGY SAVING

- 20% lower than Baseline Air Pressure in clean room
- 100% power efficient LED
- ALL non efficient chillers are replaced with efficient ones
- 2015 EENP Award



ECO VISION

- 1st Wafer Fab
 - Presidents Award (Environment)
 - Use 100% NEWATER
- Eco Garden won
 - 2021 NParks Community In Bloom GOLD Award
 - Growing Outstanding Edibles ~3kg Heaviest papaya (2019) 8.8kg wintermelon

KEY INITIATIVES TO RAISE GREEN STANDARDS

Reducing our Carbon Footprint: Since 2006, we have been implementing environmental measures such as the installation of systems to reduce greenhouse gas emissions and opting for non-hazardous alternatives.

EICC Code of Conduct: For ensuring our responsible business practices, we adopted the Electronic Industry Citizenship Coalition (EICC) Code of Conduct since 2011, which established social, environmental and ethical standards in the electronics industry supply chain, and deployed the framework to SSMC's key stakeholders.

ISO 46001 Water Efficiency Management: We are the first company in the world to earn ISO 46001 standard for Water efficiency management system. SSMC has been awarded the Water Efficient Building (Gold) since 2013.

Energy Saving Efforts: We are recognized by NEA (Energy Efficiency National Partnership Award 2015 | Best Eco Practice Award 2015 | Most Efort Eco Award 2016 | EcoFriend Award 2017). All light fittings in our premises are replaced with energy efficient ones. Eco-friendly facility systems such as chillers, pumps, heaters, air conditioners and clean room air pressure systems were upgraded and optimized.

SUSTAINABILITY

BEST MELON WON THIRD PRIZE IN NPARKS



Mike Lim Kok Poh from Facilities department, the vice chairman of our Gardening Interest Group flexes his gardening skills and his effort was recognised by Singapore National Parks board (NParks) in the Community Garden Edibles Competition 2022. In July, our winter melon (weighed 14.9 kg), proudly produced from our home grown SSMC Eco Garden, won

the third prize in the Best Melon Category. The judges recognised it as the “Best Melon” based on its uniqueness (colour, texture, unusual characteristics), conditions (crop size, freshness, appearance) and his cultivation knowledge.

ENHANCED INTEGRATED MANAGEMENT SYSTEM (IMS)



With the heightened attention on the climate change in 2022, SSMC has updated our IMS policy to focus on sustainability, ESG and CSR (Corporate Social Responsibility) driving changes and making positive impact. IMS Policy governs the Quality, Environment, Health & Safety, Information Security Management systems and Business Continuity Management system. We are committed to continually improve and innovate our processes and systems to deliver best-in-class foundry services to all our customers.

SUSTAINABILITY

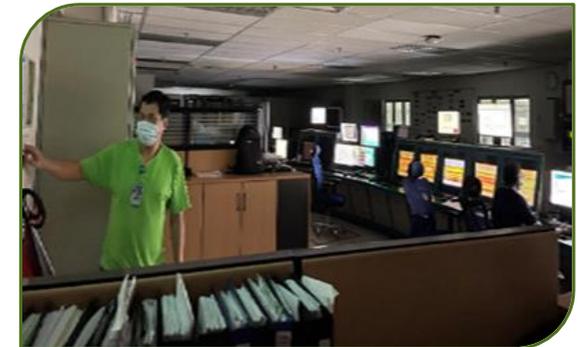
SSMC demonstrated our climate actions by supporting World Water Day activity and Earth Hour campaign to raise environmental awareness.

SUPPORTING WORLD WATER DAY



During World Water Day, we encouraged our employees to participate in NEWater's online visitor centre tour to learn more about NEWater and the importance of water conservation. To further spread awareness, infographics about the tour was created and shared with our employees on SSMC's Facebook page.

EARTH HOUR CAMPAIGN



SSMC's participation in Earth Hour 2022 was another highlight to remember as lights in the SSMC premises were turned off for an hour while production was still ongoing. At homes, our employees were also strongly encouraged to turn off their lights and any unnecessary appliances for an hour.

SUSTAINABILITY

RECOGNITIONS & ACCOLADES

Sustainability is an integral part of our business excellence journey and is rooted in SSMC's culture. Over the past 2 decades, we have stayed committed to our Eco-Vision, which is to reduce water consumption, energy consumption and carbon footprint. We are recognized as the benchmark with our green practices for the preservation and conservation of our environment. Moving towards a more sustainable future, we are committed to keeping a balance between caring for the environment while running wafer fab operations.



**National Parks Board
Eco Garden CIB Awards
(Gold, Outstanding, 1st Place Edibles)**

**President's
Award
(Environment)**

**SG Environ.
Achievement
Award**

**Best Eco
Practices
Award**

**NEA
Eco Friend
Award**

**Energy
Efficiency
National
Partnership
Award**

**PUB
Watermark
Award**

**PUB Water
Efficient
Building Gold
Award**

IMPACT ON SOCIETY

COMMUNITY GIVE BACK

SSMC believes in taking on corporate social responsibility initiatives and giving back to our community. Our steadfast corporate giving helps SSMC touch the lives of beneficiaries in our North East Community. We are thankful to NECDC (North East Community Development Centre) for allowing us to continue bringing positive impact to the lives of our beneficiaries.

On 28 September, at the Community Give Back Golf & Appreciation Dinner, Mr Desmond Choo (Mayor of North East District) presented a token of Community Give Back Appreciation to honour SSMC's contributions in the past 2 years. During the height of the COVID-19 pandemic, SSMC collaborated with NECDC on various projects.



SSMC key contributions in the North East community outreaching work:

- 2020 North East Children Growth Fund
- 2020 Thank You Hampers for medical frontline workers in hospitals.
- 2021 Dedicated Ambulance Programme for residents with chronic illness and mobility difficulties.

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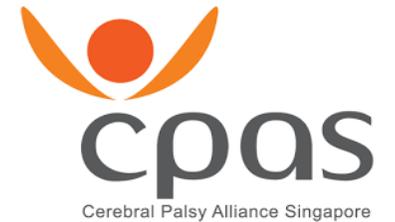
SSMC's top 3 winning departmental teams on Singapore's National Steps Corporate Challenge donated out their total winning price monies of S\$9,000 to non-profit charity organization(s) of their own choice. We would like to thank the Manufacturing Department, Industrial Engineering and Cost Excellence Department and Diffusion Department for staying healthy and giving back to the community with a big heart!

DONATIONS TO SOCIETY



Thank you for building an inclusive world with us, SSMC! Sending you hugs virtually...hope you receive it soon.

Engineering Good's geeks, beneficiaries, and office cat.



IMPACT ON SOCIETY

DIVERSITY AND INCLUSION — INTERNATIONAL WOMEN’S DAY



Did you know our cleanroom gowns are colour coded? Green for manufacturing leaders, white for assistants and engineers; while purple gowns are specially made for pregnant individuals, making them visible to receive extra care & attentions during their work duties.

In the past 2 years, SSMC has made a significant progress to become a more diverse and inclusive company. March is the month to celebrate womanhood. For a more diverse and inclusive SSMC, we continue to empower more women, focusing on women wellness and development, breaking the gender bias.





**WORKING TOGETHER
AS ONE-SSMC, OUR
TRANSFORMATION
JOURNEY CONTINUES...**