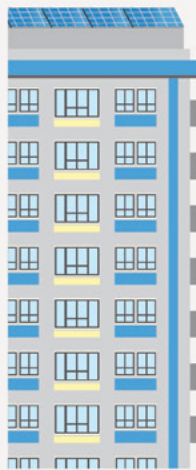# Sustainable Singapore Blueprint 2015

**T**he Sustainable Singapore Blueprint 2015, published by the Ministry of the Environment and Water Resources and the Ministry of National Development, outlines Singapore's national vision and plans for a more liveable and sustainable Singapore, to support the diverse needs and growing aspirations of Singaporeans. This blueprint is a plan for action and provides all residents a unique opportunity to work together to create a better home, a better environment, and a better future that all can be proud of.

## Sustainable Singapore Blueprint – Where We Are Today

### Eco-Friendly Buildings

**Sustainability features** implemented in some of our HDB flats

LED lighting in common areas

energy regenerative lift

centralised chutes for recyclables

**>170** **HDB blocks with solar panels**

**130** buildings have benefited from the **Green Mark Incentive Scheme for Existing Buildings**

**2,100** with **BCA Green Mark** certification

**>2,600** with **Water Efficient Building** certification

### Green and Blue Spaces

More than **80%** of households within 10-min walk of a park

**24 Active, Beautiful, Clean Waters projects** completed with **26** more underway

The **Singapore Index on Cities' Biodiversity** allows cities to benchmark their biodiversity conservation efforts over time.

1/2 of new residential and 1/3 of new commercial buildings greened under **Landscaping of Urban Spaces and High Rises scheme** since 2009

**110** existing buildings greened through **Skyrise Greenery Incentive Scheme**

|  | 2009 | 2013 |
|---|---|---|
| Amount of skyrise greenery (ha) | 10 | 61 |
| Amount of green space (ha) | 3,602 | 4,040 |
| Length of park connectors (km) | 113 | 216 |
| Amount of waterbodies open for recreational activity (ha) | 650 | 959 |
| Length of waterways open for recreational activity (km) | 72 | 93 |

### Sustainable Transport

Rail network extended to about **180 km** today

At least **4 in 5 buses** run every **10 minutes** or less during peak hours on weekdays

**>100 km** of cycling paths built since 2009

**Carbon Emissions-Based Vehicle Scheme** for more environmentally friendly vehicles implemented

### Public Cleanliness

**Department of Public Cleanliness** has integrated public cleaning since 2012

**>100 Enhanced Clean Mark** accredited companies since 2012; licensing regime introduced in 2014

**>300 litter-free Bright Spots** created since 2012

## Energy Use

**>200** companies
are part of the **Energy Efficiency National Partnership**

**$125m** of annual energy savings identified under **Energy Efficiency Improvement Assistance Scheme** and **$712m** of projected lifetime energy savings from **Grant for Energy Efficient Technologies**
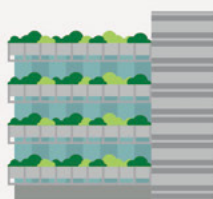
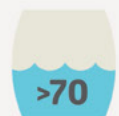**Mandatory Energy Labelling Scheme** and **Minimum Energy Performance Standards** for household appliances

Energy consumption per $ GDP, improvement from 2005 (%)

| 2008 | from **15** | to **25** | 2013 |

## Water Use

**>370** companies
have submitted voluntary **Water Efficiency Management Plans** since 2010

**>70** projects funded under **Water Efficiency Fund**

**Mandatory Water Efficiency Labelling Scheme** and **Minimum Water Efficiency Standards** for household appliances and water fittings

Domestic water consumption (litres per capita per day)

| 2008 | from **156** | to **151** | 2013 |

## Waste & Recycling

**>140 signatories** saved **>20,000 tonnes** of packaging waste under the **Singapore Packaging Agreement**

**20,000 tonnes** of waste to be reduced, reused or recycled with **3R Fund** projects

**1 recycling bin for every HDB block** rolled out since 2011

National recycling rate (%)

| 2008 | from **56** | to **61** | 2013 |

## Air Quality

Power stations and refineries are implementing process improvements

Tighter emissions standards for new vehicles implemented

| Annual ambient mean ($\mu g/m^3$) | From 2008 to 2013 |
|---|---|
| PM 2.5 | 16 to 20 |
| $SO_2$ | 11 to 14 |

Targets for 2030

1

2a

2b

3a

3b

100km

6

12 13

16 17

18

DREAM

15

5

10

11

14

9

7

8

| Indicator | | 2013 Levels | Targets for 2030 |
|---|---|---|---|
| **Green and Blue Spaces** | | | |
| 1 | Amount of skyrise greenery | 61 ha | 200 ha |
| 2 | Amount of park space and waterbodies open to recreational activity | | |
| | a) Parks | 4,040 ha | Park Provision Ratio of 0.8 ha / 1,000 population |
| | b) Waterbodies | 959 ha | 1,039 ha |
| 3 | Length of park connectors and waterways open to recreational activity | | |
| | a) Park connectors[1] | 216 km | 400 km |
| | b) Waterways | 93 km | 100 km |
| 4 | Length of Nature Ways | 21 km | 180 km |
| 5 | Proportion of households within 10-min walk of a park | 80% | 90% |
| **Mobility** | | | |
| 6 | Length of cycling paths | 230 km | 700 km |
| 7 | Modal share of journeys during peak hours made via public transport | 64% | 75% |
| 8 | Length of rail network | 180 km | 360 km |
| 9 | Proportion of households within 10-min walk of a train station | 58.5% | 80% |
| **Resource Sustainability** | | | |
| 10 | Proportion of buildings to achieve BCA Green Mark Certified rating | 21.9% | 80% |
| 11 | Energy intensity improvement (from 2005 levels) | 25%[2] | 35% |
| 12 | Domestic water consumption per capita per day | 151 L | 140 L |
| 13 | National recycling rate | 61% | 70% |
| | a) Domestic recycling rate | 20% | 30% |
| | b) Non-domestic recycling rate | 77% | 81% |
| **Air Quality** | | | |
| 14 | Air Quality | | (Targets for 2020) |
| | a) PM2.5 | | |
| | Annual mean | 20 $\mu g/m^3$ | 12 $\mu g/m^3$ (Long term: 10 $\mu g/m^3$) |
| | 24-hour mean (99th percentile) | 176 $\mu g/m^3$ | 37.5 $\mu g/m^3$ (Long term: 25 $\mu g/m^3$) |
| | b) PM10 | | |
| | Annual mean | 31 $\mu g/m^3$ | 20 $\mu g/m^3$ |
| | 24-hour mean (99th percentile) | 215 $\mu g/m^3$ | 50 $\mu g/m^3$ |
| | c) Sulphur Dioxide ($SO_2$), 24-hour mean (Max) | 75 $\mu g/m^3$ | 50 $\mu g/m^3$ (Long term: 20 $\mu g/m^3$) |
| | d) Ozone, 8-hour mean (Max) | 139 $\mu g/m^3$ | 100 $\mu g/m^3$ |
| | e) Nitrogen Dioxide ($NO_2$) | | |
| | Annual mean | 25 $\mu g/m^3$ | 40 $\mu g/m^3$ |
| | 1-hour mean (Max) | 132 $\mu g/m^3$ | 200 $\mu g/m^3$ |
| | f) Carbon Monoxide (CO) | | |
| | 8-hour mean (Max) | 5.5 $mg/m^3$ | 10 $mg/m^3$ |
| | 1-hour mean (Max) | 7.5 $mg/m^3$ | 30 $mg/m^3$ |
| **Drainage** | | | |
| 15 | Flood-prone areas | 36 ha | 23 ha |
| **Community Stewardship** | | | |
| 16 | Number of active green volunteers | >1,000 | 5,000 |
| 17 | Number of Community in Bloom Gardens | >700 | 2,000 |
| 18 | Number of litter-free Bright Spots | >300 | 500 (by 2015) |

[1] Includes Round Island Route
[2] The figure includes estimated consumption data on Liquefied Petroleum Gas (LPG) and petroleum coke.

Read all about the initiatives under the Sustainable Singapore Blueprint 2015:

www.sustainablesingapore.gov.sg