

The Sustainable Sydney 2030 Plan is the result of a comprehensive community consultation process aimed at co-creating a long-term vision for Sydney. From a revitalized, walkable city-center to an integrated transport network replete with green corridors, a people-focused approach to ecomobility is at the heart of the Sustainable Sydney 2030 vision.

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Sydney & ecomobility 'in context'

Located in the state of New South Wales (NSW), Australia, the City of Sydney is home to over 205,000 residents and accounts for approximately 4.2 per cent of the over 5,000,000 people living in Sydney Metropolitan Area. As a cultural, commercial and research hub, upwards of 600,000 tourists, commuters and students pass through the City of Sydney each day.

The City of Sydney is also a national economic hub: 7 per cent of the national economy, more than 30 per cent of the Sydney Metropolitan Area economy and over 20 per cent of the gross domestic product for NSW is generated within the City limits. The City is expected to experience consistent growth in a number of sectors from 2012–2031. The total population is expected to grow by 46 per cent, employment will increase by 27 per cent, and the number of total housing units will increase by 52 per cent.

The Sustainable Sydney 2030 Plan reflects a vision that will ensure that livability is emphasized and enhanced as the City of Sydney grows. City officials have identified mobility as a integral aspect of livability. As people continue to flock to live, create, work and learn in Sydney, they will find themselves moving throughout a green and connected sustainable city.

A Sustainable Sydney by 2030

For the City of Sydney, the pursuit of sustainability takes an integrated approach to environmental, economic, social and cultural factors. Accordingly, the City has identified ecomobility as a cross-cutting action area. Sustainable urban transport options can reduce carbon emissions, leverage increased investment in alternative sources of energy for renewably powered public transport, avoid the harmful health and air quality consequences of atmospheric pollution, and promote increased physical activity through the creation of walkable public spaces and increased infrastructure for bicycling.

The Sustainable Sydney envisioned for 2030 is a vibrant and active city. From the beginning of the community consultation process for the strategy, the City has sought to incorporate the vibrancy that is inherent across its residents by incorporating perspectives from various stakeholder groups.



Facts & Figures

Population

208,374 (4.2% of the Sydney Metropolitan Area)

Land area

26.15 km²

Modal split (2011)

Walking: 25.3%

Bicycling: 2.9%

Public transportation: 29.5%

Personal automobile: 26.5%

Other: 15.8%



Sydney has been a Member of ICLEI since 1992 and is a participant in the EcoMobility Alliance

The Sustainable Sydney vision has identified five key interventions to transform the City, and sustainable urban transportation is integral to the successful completion of each.

1. A liveable, people-friendly City Center that is re-connected to the iconic Harbour area.
2. An integrated sustainable transport network which minimizes traffic congestion.
3. A living green network full of green corridors a dedicated pedestrian and bicycle paths.
4. Activity hubs which serve as vibrant community spaces in each of the City's villages.
5. Sustainable development renewal initiatives to revitalize infrastructure, reduce utility costs, and improve access to housing and essential transport choices.

Description of activities: What ecomobile initiatives are underway in Sydney?

Insofar as the contribution that ecomobility can make to the Sustainable Sydney 2030 vision, the City of Sydney has strategically targeted improvements in three key areas: walking, bicycling, and public transportation.

Walking in Sydney

In a city full of world class landscapes, shopping, and cultural offerings, walkability is understandably a significant priority. The City of Sydney has established ten walkability targets it wishes to achieve in order to foster a more active and connected urban experience.

- Walking to make up one third of commuter trips by City residents
- Walking to account for 60 per cent of local trips by City residents
- Reduce delay to walking times by ten per cent across key walking routes
- Increase footpath capacity by 20 per cent on average on main activity streets through planned upgrades
- Improve walking amenities by ten per cent on main activity streets through planned upgrades
- All residents to be within a ten-minute walk (800 m) of commercial space suitable for essential daily needs
- All residents to be within a three-minute walk (250 m) of the Liveable Green Network
- Reduce traffic related crashes involving people walking by 50 per cent
- Walking to make up 50 per cent of trips to and from late night precincts
- 90 per cent of residents feel safe walking during day and night time

In addition to targets that are driven by urban planning, the City of Sydney encourages walking as a mode of transport for citizens and visitors through a number of initiatives. The City provides 15 distinct walking tours through the Sydney Culture Walks App, and engages with residents over the age of 55 through the Sydney Walk Eat and Talk (SWEAT) program which combines walking, eating and practicing English.



Image 1: Attractive and safe open spaces make for happy pedestrians in Sydney Source: City of Sydney

Bicycling in Sydney

Bicycling infrastructure in the Greater Sydney region has increased notably over the past ten years and further improvements are in the planning stage. To date, there are 12.5 km of separated cycleways, 60 km of shared paths, and 40 km of other bicycle friendly infrastructure. The City has announced plans to construct a 200 km bike network and also provides courses on bicycle maintenance and organizes public events to inform both residents and visitors to Sydney about the environmental and social benefits of bicycling.



Image 2: Clearly marked bicycle lanes promote increased ridership Source: City of Sydney

Although the City of Sydney has carried out a bicycle sharing feasibility study, there is no current municipally-operated bicycle sharing program in the city. That being said, Sydney is host to a bicycle sharing startup, Reddy Go, which introduced 160 bicycles into the city in July 2017. The bicycles are dockless, meaning that they can be parked anywhere and do not necessarily rely on municipal infrastructure, and can be located with an App. Reddy Go indicates illegal places to park and recommends that its bicycles are returned to public bicycle racks.

Expanding bicycling and walking infrastructure is central to the City's goal of creating a *Liveable Green Network* that will ensure that Sydney is green, global and connected. The Liveable Green Network concept is guided by the goals of enabling everyone to walk or cycle around the city, as well as creating public spaces and making them more attractive by improving the connection between city's villages, parks, open spaces and entertainment facilities. Realizing the concept requires infrastructure improvements that include traffic calming measures, wider pedestrian pathways, increased numbers of pedestrian crossings, better signage for finding your way throughout the city, and improved lighting and parking for bicycles. In support of these improvements, the City performed a complete audit of Liveable Green Network infrastructure in 2015 in order to identify priority areas for improvement.

The City of Sydney has also made it easier for its staff to lead by example by bicycling to work. Staff can use a bicycle from the City's fleet of 26 bicycles and use the facilities provided at the municipal offices, which include 150 bicycle parking spaces, 150 lockers, changing rooms, wheelchair accessible bathrooms and showers, and a water station. Provisions such as these help City staff adhere to the municipal transport hierarchy: Active Transport (walking or bicycling) – Public Transport (buses and trains) – Drive Green (using the City's fleet of low and zero emissions vehicles).

Public transportation in Sydney

The Sustainable Sydney 2030 strategy aims to build an efficient public transportation system - in the form of an integrated rail, bus and ferry network – to serve both the City of Sydney and the surrounding metropolitan area. surrounding suburbs, NSW TrainLink which serves both the metropolitan Sydney area and provides connections to nearby major cities, and will soon feature a rapid light rail network. The City of Sydney is not the primary operator of any of the state-managed rail networks serving the City, but is very aware that the system is reaching full capacity in the light of steady population and employment increases – between 2006 and 2036, total population and employment in the City of Sydney are expected to increase by 60 per cent and employment by 31 per cent respectively – and recognizes that it is important to facilitate transport alternatives other than bicycling and walking.



Image 3: Artists rendition of the future light rail line in the City of Sydney Source: City of Sydney

Air quality and GHG emissions

The City of Sydney, within their municipal 2016-2021 Environmental Action Strategy, has targeted a reduction in greenhouse gas (GHG) emissions of 44 per cent (against a baseline of 2006 levels). Reducing GHG emissions from the transport sector can also result in a reduction of additional air pollutants and can provide co-benefits which achieve other strategic objectives, such as improving air quality and enhancing health and well-being.

Presently, emissions generated by the municipal fleet of automobiles are linked to seven per cent of the City of Sydney's total emissions. The City has already made considerable investments in order to procure a sustainable fleet – including introducing the first zero-emission electric vehicles to Australia through a partnership with Mitsubishi – and have specified minimum environmental compliance standards as a criterion which must be met by all vehicle and fuel tenders. It has also established a 'Low-risk and Eco-driving Handbook' and is active in providing ongoing training to staff in order to reduce emissions even further. The City has established a target of having zero increase in emissions from the municipal vehicle fleet by 2021 (against a baseline of 2014 levels).

Outcomes of Sydney's strategic approach to sustainable urban transport

The City of Sydney has made strong progress on several of indicators that are linked to ecomobility.

- As of October 2016, 5 per cent more people are bicycling across surveyed areas than in October 2015, marking a 98 per cent increase since 2010.
- Over 7000 people commute daily to work to the city center by bicycle.
- As of November 2016, 32,439 city residents and businesses were members of a car sharing company.
- 650 on-street parking spaces have been assigned to car sharing vehicles.
- As of December 2016, the City has established wayfinding signage for walking by installing ten pylons, 47 flags, and 27 finger signs, and 2,100 tactile braille signs.

The City holds an annual Sydney Rides Business Challenge, wherein businesses encourage their employees to ride to work during the month of March. In 2016, a record 4,465 people from 359 organizations took part, making it the largest event of this type worldwide. In 2017, despite some wet weather, 4,400 people participated and made 46,000 trips, riding a total distance of 766,000 km. The City staff also participates in the Challenge, with 156 staff members – and 28 new bicycle riders – taking part in 2016. Since the introduction of the City Bike Fleet in January 2012, 599 City staff have been trained and a total of 20,027 total km have been travelled.

For sustainable fleet management, the City has expanded the storage of biodiesel tanks and achieved their target of zero increase in fleet emissions in during the 2015-2016 fiscal year: 2015-2016 emissions equaled 2,160 tCO₂-equivalent, surpassing the target by 190 tCO₂-e.

In addition to infrastructure improvements to support the Liveable Green Network concept, the major development underway within the City of Sydney is the 12 km Central Business District and South East Light Rail route, which will require 31 construction zones over the course of three years. The project is being carried out by the NSW government; however, the City of Sydney is providing AUD 220 million towards the project, which will include the transformation of George Street, Sydney's original 'high street' and one of the most trafficked streets in the city. The City has signed an agreement with the NSW Government to ensure that the project meets certain design standards which promote vibrant, ecomobile and safe public spaces.

Awards

The City of Sydney has received considerable acclaim for its sustainable fleet management and safety initiatives. The City was a finalist in the National 2015 Banksia Awards' Mindful Movement category. In September 2016, they were awarded for their Crash Management Strategy and Low-risk and Eco-driving Handbook. Following this, in reflection of their success in developing a zero crash culture, the City received the CGU Insurance Benchmark Award for 'Inspiring Excellence in Fleet Risk Management'.

The City's efforts at creating a bicycling culture have also been recognized, as the municipal cycleway network and commitment to promoting cycling was awarded the People's Choice prize at the 2016 Green Cities Conference.

Challenges and lessons learned

In countries with low density such as Australia, and in fast-paced cities such as Sydney, it can be difficult to transition away from automobile culture and in turn, make residents and visitors feel safe bicycling and walking on city streets. Change of this sort is understandably gradual, but can be accelerated with amenable urban planning and education initiatives. With an increasing number of pathways shared between pedestrians and bicyclists, the City of Sydney has done well to introduce training courses under the Share the Path initiative, a campaign to increase awareness of safe and responsible bicycling and walking.

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One of the impediments to the uptake of bicycle sharing in Australian cities is the strict national law on mandatory helmet usage which deters casual cyclists. The Reddy Go bicycle sharing start-up may prove capable of overcoming this deterrent, but if successful, the proliferation of a dockless bicycle sharing program – and potential competing providers – will place pressure on the City to quickly expand its bicycle parking infrastructure.

Even when all technological advances have been pursued, there are still ways to make driving a car more environmentally friendly. The City's eco-driver training programs have provided increased awareness of the effects of climate change and have significantly improved driving skills and behavior, with emissions savings estimated at 5 per cent.

With public transportation in Sydney already close to capacity, and strong growth rates forecast for the next 20 years, the City realizes that it must rapidly address traffic congestion problems by providing people effective solutions to commute comfortably everyday without using private cars. To achieve this change at the scale required, strong integrated policy within the metropolitan area and with the NSW state government is required.

Such alignment with policies and objectives at other levels of government can transform a challenge into an opportunity: the City of Sydney and the NSW state government are working together to transform the city center through the CBD and South East Light Rail and to construct additional cycleways. To date, all separated cycleways built in the local government area have been funded by the City, whereas the costs of some future cycleways will be covered by the NSW state government.

The NSW state government takes care of the planning and the delivering of public transport through a dedicated committee (Local Pedestrian, Cycling and Traffic Calming Committee and the NSW government's Central Sydney Traffic and Transport Committee).

References and further reading

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