



MRS Awards 2022
Sustainability Research
Winner

Liz Nelson
Grand Prix for Social Impact

The Behavioural Architects
NSW Department of Planning
and Environment

Making Sydney Greener!

Summary

Over the years cities have become less green because we have blithely eradicated the tree canopy that makes them healthier places to live. The NSW Government's 'Greening Our City' programme set out to reinvigorate and expand the tree canopy across Greater Sydney by planting one million trees by the end of 2022. The programme required trees to be planted on private land. However, research identified a *literal* NIMBY (not in my back yard) barrier to this.

The word 'tree' was the barrier, since whilst it primed 'beautiful', it also primed 'BIG'. Too big in fact for people to envisage in their backyards. This insight became the cornerstone to the "Greening Our City" communication strategy, which avoided the word 'tree'; creating new positive primes, giving salience to the dynamic social norm and making tree planting easy to do.

The *Everyone Plant One* Campaign launched in October 2021 and completed its first wave in March 2022. **Rather than talking about trees per se, the campaign focused on the offshoot benefits afforded by trees** such as shade, privacy, birds, and colour.

By 23 May 2022, 785,984 trees had been planted and the campaign is on track to hit the target of 1,000,000.

Synopsis

The NSW Government's 'Greening Our City' programme set out to increase the tree canopy across Greater Sydney by planting one million trees by the end of 2022. The loss of canopy had been identified as a key contributor to the rapid heating of Sydney's outer suburbs.

The numerous causes of canopy loss include physical and behavioural barriers, such as the decline in domestic open spaces, and the priority placed on street design and utility requirements over tree planting.

Earlier research indicated the **need to encourage a greater sense of personal responsibility amongst homeowners, whilst acknowledging that public education alone was unlikely to overcome the barriers**. While people generally accept there is some acceptance of the environmental benefits of trees, and appreciate trees on public land or other people's property, **many did not want to plant trees in their own backyard (classic nimbyism)**.

A significant shift in communications strategy was required to drive behavioural change and get people to plant trees.

The NSW Department of Planning and Environment engaged The Behavioural Architects (TBA) to **devise a behavioural research programme and behaviour change strategy to encourage the planting and registering of trees on private property**. The research programme began in 2020 and is ongoing in 2022.

Research Design and Rationale

The approach was designed in four distinct phases over a two-year period:

1. Define
2. Discover
3. Develop
4. Review and Refine

The **Define** stage was designed to map known influences on tree-planting behaviour and develop hypotheses, explored and tested in research. It had four components, each designed to apply a Behavioural Science (BeSci) lens to existing knowledge, research and understanding:

1. **Issue definition workshop** with the client to explore existing knowledge and hypotheses and identify different ways to frame the problem.
2. **BeSci lens review** of existing research, strategic documentation, and analysis of social media, to identify new hypotheses about potential triggers and barriers.
3. These hypotheses were further developed through interviews with **24 stakeholders**, from public and private institutions, including the environment, development and planning and government departments.
4. Finally, the **TBA team mapped the behavioural journey for tree-planting**, capturing all known and hypothesised triggers and barriers.

Armed with well-informed hypotheses we proceeded to the **Discover** stage of the project, employing three methodologies:

1. **Initial community consultations in three of Greater Sydney's five regions**, conducted as two-hour discussion groups to explore understanding of language and frames of reference employed. For example, were terms like 'Heat Island Effect' sufficiently meaningful to engage people? We also explored **imagery, vocabulary, and unconscious associations** through projective techniques.
2. For deeper insight into the behavioural challenge, we recruited **40 community members across Greater Sydney's five regions to participate in a self-ethnography study**. Over two weeks, we set participants daily behavioural missions which they captured on film. We asked them to video their backyards, reflecting on what was important to them so we could understand the role of trees in their lives. We also asked them to choose, buy and plant a tree in order to gain insight into the complexity of the behaviour that the campaign would require of people. It is one thing to aspire to plant a tree, but another to actually see it through!

3. **To enhance rigour and confidence in our insights, we conducted a community sentiment study with n=1,000 residents of Greater Sydney**, informed by learning from the qualitative research, in terms of language, frames of reference, and insight into triggers and barriers.

In the **Develop** stage we analysed our findings, tested our behavioural hypotheses and developed a comprehensive behavioural change strategy grounded in BeSci.

A key output was the identification of **three main reasons discouraging tree planting on private land**:

1. **The word 'tree' is a barrier** itself, evoking images of trees in parks – beautiful but big. Using the word 'tree' in the context of asking people to plant a tree on private land unlocks negative associations relating to size, danger, inconvenience, mess which are at odds with what people wish for in their private open space.
2. **Visible social norms for trees tend to be about tree-removal rather than tree-planting**. Thus when people think of trees, they tend to think of cutting them down rather than planting them.
3. **Tree-planting is a difficult process that can be off-putting**. Even with sufficient motivation, we uncovered significant, sequential barriers to choosing, buying, planting and maintaining a tree.

Happily there were clues to the solution in the behaviours of people who were already planting trees on their property.

We identified three principal reasons why trees are currently planted on private land:

1. **People want to address an issue** in their garden (e.g. more privacy, encourage flowers etc). The starting-point is what people want to achieve, to which the answer may be a tree, as opposed to starting with the desire to plant a tree.
2. **People are suggestible**. Free tree giveaways by councils generate a good response. So people may respond to ideas, even if they do not initiate.
3. **Helpful advice, delivered in a timely, chunked, and easy manner** can make the tree-planting process much easier.

These insights became the foundation of the ‘Greening Our City’ communication strategy. NSW Department of Planning and Environment appointed an advertising agency to bring the campaign to life, **using four strategies to unlock the required growth in tree planting.**

1. **Communicate the benefits and solutions for gardens afforded by trees** (i.e., shade, privacy, birds, colour etc.) rather than assuming people want trees per se.
2. **Build a more appealing vocabulary and positive priming palette around trees** to displace the negative associations that the word ‘tree’ currently brings.
3. **Give salience to a dynamic social norm** – that more and more people are planting trees in their gardens.
4. **Make the tree-planting journey easy** – chunked, timely (not all-at-once) information.

The Campaign

Initially delayed by COVID, The Everyone Plant One Campaign launched in October 2021 and finished its first wave in March 2022. People were invited to join the campaign via a digital hub with seven web pages dedicated to the different benefits of trees [see campaign sheet appendix 1]. People could ‘join in’ in two different ways – by pledging to plant (activating the BeSci principle Commitment Bias) or registering a tree already planted (activating Endowment Bias and helping keep a record).

The campaign used paid advertising via social media (Facebook and Instagram), plus Digital Media (Nine, SMH, &News, The Guardian, Yahoo, Apple News and MSN) extending the messaging.

Influencer press packs were also created. Twenty influencers across Greater Sydney were sent a finger lime tree from IndigiGrow with information about the campaign and a request to encourage and inspire others.

As tree numbers grew, we gave prominence to this social norm at the Sydney Film Festival showing the real-time number of registered trees [see campaign sheets appendix 1].

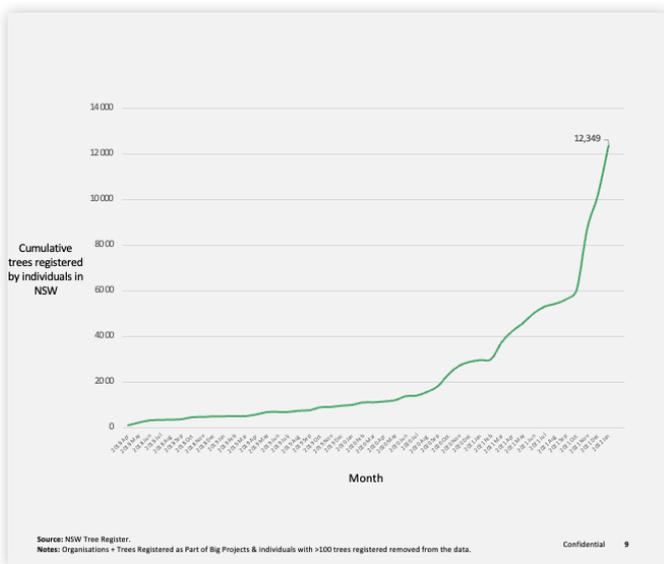
The campaign also included an Instagram competition, industry media releases, organic social and amplification by organisations such as Planet Ark, Greening Australia and local councils.

All elements of the campaign adopted the same messaging approach: showing the benefits of trees without giving undue salience to the word ‘tree’, to avoid inadvertently evoking negative associations. Critically for this campaign’s success, people were invited to ‘Plant one to cool the community’ not to ‘Plant a tree to cool the community’ [see campaign sheets appendix 1].

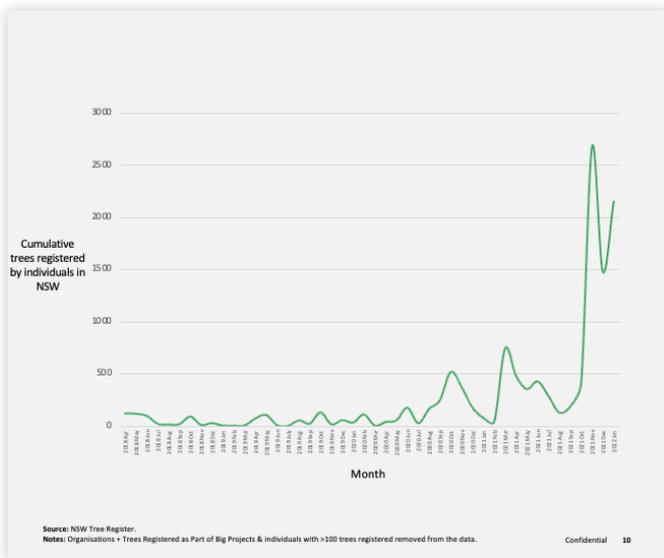
The Impact

making Sydney Greener

The campaign ran from 21st October, 2021, to March 2022, with an immediate uplift in the number of trees planted and registered. The chart below shows the cumulative number of trees planted and the sudden steep rise from October 2021 [see appendix 2].



This second chart [see appendix 2] shows the number of trees planted each month and again shows a rapid increase coinciding with the campaign’s launch. There had been a prior trend upwards in tree-planting owing to Free Tree Giveaways, exposure to Bushcare groups and National Tree Day and the response to these events can be seen in monthly spikes below.



The most recent behavioural change data highlighting the work’s impact is the 2022 Community Sentiment Tracker, collecting data in April ’22 and replicating key questions from the 2020 study. The sample was n=1,000 residents across Greater Sydney with access to and authority over private outdoor space.

The study also identifies changes in community attitudes and behaviours, in addition to direct behavioural data from tree-planting registrations.

The study showed significant increases (at P>95%) in:

- Registration of planted trees (from 29% in 2020 to 43% in 2022).
- Greater agreement with likelihood to plant a tree in the next 12 months (from 26% in 2020 to 35% in 2022).
- People aged 35-44 increasing in likelihood to plant a tree in the next 12 months (from 18% in 2020 to 26% in 2022).

As of 23 May 2022, 785,984 trees had been planted and registered, and the campaign is on track to hit the target of 1,000,000.

Acknowledgements

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