# **WAT’s Sustainable? Episode 03 Transcript**

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WAT is up, Waterloo? Welcome to *WAT's Sustainable?*, the official podcast of the University of Waterloo's Sustainability Office. My name is Jenna, and I am the host of this episode. Today in Episode 3, we are going to be talking about: WAT is urban green space? We will start by exploring the topic of urban green space, what it is, and why it matters. Then we will discuss some case studies on major Canadian cities and what they are doing or *not* doing to promote urban greenspace. We will also talk about what we can do to promote urban green space in our communities and then we will provide resources for learning more and encouraging you to take action in your community.

And as a reminder, if you have any questions, ideas or guests that you would like to see featured on the *WAT’s Sustainable?* podcast, make sure to email us at sustainability@uwaterloo.ca and follow us on Twitter and Instagram @UWsustainable to keep updated on all our other sustainability related activities, promotions and content.

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As usual, we will kickstart our episode with a Global Hurray and this one is of course related to urban green space. In the past few weeks, the City of Sydney in Australia has released the *Sustainable Sydney 2030* strategy. This is the City of Sydney's Smart Growth Plan that has several targets and initiatives to implement that will increase urban green space throughout the city. Most notably, this includes planting 700 trees annually to meet specific canopy cover targets, increasing green roofs, green walls, and streetscaping gardening across the city, and achieving a broader goal of covering two-thirds of the city in greenery by 2050. Some of the more incremental goals include:

* Increasing canopy covered to 23% by 2030 and 27% canopy cover by 2050,
* Achieving 40% vegetation and green cover across the city by 2050, and
* Creating greener buildings with all public and privately owned properties providing 28% of green cover and including 20% tree cover

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To achieve these short- and long-term goals, the City has implemented 20 priority actions, which range from incorporating Indigenous ecological knowledge into their city planning, providing many meaningful public participation opportunities, enhancing accessibility of green spaces and more. This is a great way to seque into our conversation about urban green spaces today and what cities can be doing to promote them and why they are so significant. I thought that this was a great story to share with all of you to get you thinking about urban green space and how cities can be taking action independently to be promoting green space within their communities that will improve the quality of life for their community and environment.

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Let's get into the topic for today. What is urban green space? Green space is equivalent to land covered by vegetation of any kind. That's the most basic definition that there is. Then looking at the word “urban” simply means a densely populated area. In other words, a city, or town. Urban green space is green land existing in cities and towns which contrasts typical urban characteristics that are more associated with “grey” infrastructure. Things like pavement buildings, other grey infrastructure, and so on.

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We are going to switch gears for a moment to talk about the concept of sustainable cities. Now making our cities more sustainable has been in conversations for decades and it's really been in the past few years that cities across the world have been implementing sustainable growth strategies, management plans to accentuate the sustainability features of their communities, which will better both the lives and wellbeing for the actual residents of those communities and the environment. But when we generally think of sustainable cities, we are often thinking about things like enhancing their renewable energy access, increasing energy efficiency, reducing waste, improving their waste sorting facilities, increasing and improving stormwater management facilities. We are not automatically thinking of green space and the benefits of urban green space. Yet urban green space is just as important, if not even more important, because it provides additional benefits to human and environmental wellbeing by implementing it in our communities.

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Green space can be something as simple as trees lining the street, a green roof or a gardening plot on a patio or on the street. Such small, even singular actions can lead to the creation of healthy and vibrant cities, which is I don't know about you but a type of city that I would like to live in in the future. Although traditionally policy and technical strategies within cities have focused on energy, waste and water, there is a growing emphasis on the need for urban green spaces as more studies and research an international priorities are being set out that identify the benefits and the importance of urban green space for our livelihoods and for the wellbeing of our communities. For instance, there is more and more interest on the economic benefits of urban green spaces, and specifically the natural capital. A study done in the City of Toronto in 2018 estimated that there were $55 million worth in annual benefits coming from trees simply within the city due to their abilities to sequester carbon, filter the air and for the mental health and wellbeing benefits that those trees provide.

We will get more into these benefits shortly, but that's just something to be considering and why it's so important for us to be talking about urban green space and focusing on increasing the amount of urban green spaces that we have in our communities.

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Similar to what the City of Sydney has been doing to promote urban green spaces, cities like Vancouver are already taking significant actions to promote urban green spaces to improve the sustainability of their cities. Vancouver is the city with the lowest per capita greenhouse gas emissions of any city in North America. This can be attributed to not only running 90% of the city on renewable energy, but also the amount of urban green space that exists that can act as a carbon sink. In other words, absorbing emissions from the atmosphere. Green spaces run along most of the city sidewalks and bike paths in Vancouver, and one strategy that the city has established to promote the creation of these green spaces is the Greenest City 2020 Action Plan. Within this action plan, Vancouver has a goal of becoming the “greenest city in the world.” Some of their goals within the Strategy and within this broader goal include:

* Ensuring that every person living in Vancouver is within a 5-minute walk of a park, greenway or other green space by 2020 – so that's already passed,
* Restoring or enhancing 25 hectares of natural area between 2010 and 2020,
* Planting 150,000 additional trees in the city between 2010 and 2020, and
* Increasing canopy cover to 22% by 2050

This represents a significant strategic action to promote urban green space.

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When we are not prioritising the inclusion of urban green spaces in our communities, there are some unfortunate negative outcomes to this. One significant environmental one is habitat loss due to land use change, clearing, in addition to the impacts of climate change as we are reducing our urban green spaces and other factors that contribute to climate change and pollution and damage because urban green spaces not only act as natural air filtration, but they can filter water, they can provide natural purifying services, and so they keep our communities clean. But without urban green space, we don't have that natural cleaning service. There's also pollution from noise, air, and light. So this is impacting ecosystems. It can confuse wildlife. For instance, if there's a lot of noise or if there's a lot of light, it can mess up their life cycles, their reproductive cycles, and so that impairs their ability to live our lives.

From a community standpoint, it also increases our vulnerability to climate change from flooding, heat waves and more. Trees and other urban canopies provide natural cooling in our communities and urban green spaces also can absorb water, so if there's flooding it reduces the risk of flooding because we're better able to absorb that water. But without urban green spaces, pavement is not permeable, so they can't absorb the water and it increases the chance of flooding. And without any sort of shade or cooling from trees, we will be experiencing the urban heat island effect more and more, which is when urban spaces amplify heating that is already going on and it can make cities as much as 10 degrees hotter than external rural areas. From a psychological standpoint, the lack of urban green space in our communities can contribute to feelings of isolation. One particular example of this is called “Nature Deficit Disorder.” This is a loss of connexion to nature that people have been experiencing over the last few decades. This is the focus of a book called “The Last Child in the Woods,” which was published in 2005, that labelled Nature Deficit Disorder. It's referring to the fact that as a society we are spending a lot less time in nature, and as such we are losing a sense of connection to nature. This is important for our sense of place, who we are as people; it keeps us grounded and connected to the earth and it just makes us more aware and more mindful of our surroundings.

COVID-19 has especially exacerbated the negative impacts of not having access to urban green space. When we're stuck indoors all day, and we don't have access to safe open outdoor spaces where we can get fresh air, we can exercise - this has serious impacts on our physical and mental health. Some lower income neighbourhoods in Toronto that have a higher amount of urban green space actually have lower self-reported levels of mental health issues, demonstrating the benefits that urban green space can provide for our mental health and wellbeing.

And it's not just the quantity of green space that matters, but also the quality: we need to make sure we are managing these spaces. Let's say if an urban park was created a decade or so ago, but then it wasn't managed and community members can't really use it because it's polluted, the plants are dying – it doesn't really have a whole lot of potential.

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So WAT? What can we do to be promoting urban green spaces? Well we need to recognise the significance of urban green spaces on a community level and on a broader level, which is already being done. The Sustainable Development Goal #11 does have measures that recognise the importance of urban green spaces, and it's kind of interwoven throughout other Sustainable Development Goals that recognise the importance of biodiversity and natural land for human and environmental health.

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We also need to be emphasising the role of ecosystem services and their value in our communities. As I mentioned there are millions of dollars if not billions of dollars stored in the natural capital of urban spaces due to their ability to produce oxygen, sequester, carbon, filter water and more. And again, there are many social benefits to having urban green spaces. Increasing our overall mental health, building relationships with the natural world can foster a sense of respect and reciprocity with the world – I encourage you to check out books like Braiding Sweetgrass by Robin Wall Kimmerer and The Hidden Life of Trees by Peter Wohlleben to really understand what it means to have respect and to create a sense of reciprocity with nature. It also contributes to social health, cohesion, community connection and community social resilience. It provides opportunities to promote physical activity and physical health. It can serve as an educational tool to familiarize you with your local biodiversity, again, to foster a sense of respect and appreciation for nature, and it can provide essential things to survive like food because we can have community gardens – that's a great way of creating urban green space!

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So what needs to be done is cities are in our communities need to create more urban green spaces. In a study by the City of Toronto, it was found that just by planting 10 more trees per city block, we could reduce cardiovascular disease, respiratory disease, the rate of depression significantly. In addition to the climate change resilience and adaptation benefits, the social cohesion benefits and more.

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So I know I am mentioning the importance of including urban green spaces in our cities and in our communities, and I know that might sound a little bit far away from what we as individuals can achieve, but actually, our individual actions *can* promote the creation of urban green spaces in our communities, and that's going to be the focus of this next section. We're going to be talking about actions that you can take as individuals to promote urban green spaces in your communities.

One of the first things that you can do is explore the urban green spaces in your community that are already offered. Ask yourself: what do you like about it? How does it make you feel? Does its location and layout benefit the broader community? What's the accessibility of these urban green spaces? Keeping that mindfulness and that awareness of what you have, its benefits and maybe the challenges with these areas can get you thinking about ways that you can inspire and create change in your community, because maybe if you identify that there's an accessibility issue, you can bring that forward to a city councillor who may then be able to address it in city policies, and they may be able to increase the accessibility of that particular green space, in addition to the creation of urban green spaces moving forward.

If you are interested in getting your hands dirty metaphorically, but also physically if you enjoy gardening, you could explore financial opportunities to create your own urban green spaces in the community. For example, if you live in Waterloo Region, you can apply for the Community Environmental Fund. This is a fund that is distributed annually by the Region to allow residents to create community projects that promote sustainability, environmentalism and so on. They have in the past provided funding for tree planting, pollinator gardens and more, so if you have an idea for a particular location to grow let's say a community garden or some areas that you want to plant trees, you can apply for this fund and you can get thousands of dollars' worth of funding to create your own project.

If you're interested in providing feedback for your community on certain developments that are ongoing, or are being planned, you can see if there's any online forums to provide your feedback or opportunities for you to speak to city councillors. In Waterloo, there is the Engage Waterloo website, which provides an online form that allows citizens to offer feedback, share opinions, and exchange ideas about city programmes, services and decisions. There are many opportunities to incorporate more green spaces into the projects listed on this website, and the website is updated quite regularly. So if you are a Waterloo resident you can check out the projects that are asking for feedback right now and you can go provide your feedback and suggest some ways to maybe increase the accessibility of your green spaces, or where more urban green spaces can be created.

You can also even create your own green space or enhance your personal green space in your garden by planting pollinator friendly plants, or creating your own native species garden. Right now through Reep Green Solutions, if you live in Waterloo you can purchase their Bloom {In} Box, which is a box full of native pollinator-friendly plants. It only costs $90.00 and you can get a $45.00 rebate if you are living in Waterloo, and this box is available until May 24th, 2021. All of the proceeds from these boxes will go towards future conservation and restoration projects that Reep offers.

If you want to promote green spaces and biodiversity in your community, but you don't have access to your own personal green space, you can consider volunteering at a local organisation that is helping to create or manage these urban green spaces in your community. Reep Green Solutions in Waterloo regularly recruit volunteers and most other municipalities have programmes to hire young people to manage green spaces during the summer. You could also consider working or volunteering for a conservation authority which are all across Ontario and other provinces in their own forms. You could also join a community club for people who love conservation and creating urban green spaces. A great example in Waterloo is the Waterloo Region Nature Club, which is a group of enthusiastic community members which come together to discuss and to take action on protecting and preserving wildlife, plants and ecosystems, promote public interest in nature through outreach and legislation and more.

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At the local scale, the University of Waterloo is taking the creation of urban green spaces and their conservation seriously: in our Environmental Sustainability Strategy, Objective O9 outlines our priorities here. Our goal is by 2025 to have all University grounds be maintained according to sustainable landscaping standards and develop plans for remediation and preservation of specific natural areas of concern. The University also uses Integrated Pest Management practises to increase the quality of its urban green spaces and to make sure that our grey infrastructure is not negatively impacting urban green spaces. These Integrated Pest Management principles and elements of sustainable landscaping management that we already use incorporate plant in soil stewardship, environmentally preferable materials, hydrology and water use, materials and waste management and snow and ice management. The University has also only been planting native plant species as of 1997, making sure that when we are creating green spaces, we are doing so responsibly.

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In summary, when we think of sustainable cities, we often focus on energy, waste management and other existing services that we can create more sustainable. We often don't think of urban green spaces, although they are becoming more popular. Urban green spaces are equally as important as these other services for maintaining the health and wellbeing of both the planet and human communities, and it also provides positive benefits like natural capital, mental health and more. The quality and quantity of urban green spaces matter, and we should be striving in whatever community we live in to be increasing both. And there are many ways to support green spaces in your community, such as volunteering for local organisations, gardening at home, participating in community discussions and feedback opportunities and more.

There will also be additional resources in the show notes to help you engage with your community green space, learn what you can do as an individual to promote the creation and conservation of urban green spaces, and some case studies and research projects that share local successful stories on creating urban green spaces to get you inspired and engaged in your community.

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That is all for Episode 3 of *WAT’s Sustainable?* I hope you enjoyed this episode. If you did, we would love it if you shared this episode with your friends, family and peers, and if you have any ideas for future episodes such as topic ideas, guests that you would like to see on, feel free to send us an email at sustainability@uwaterloo.ca and make sure to follow us on social media on Twitter and Instagram @UWsustainable.

That's WAT's up, Waterloo. This is Jenna, the host of this episode signing off. I hope you have a great day and we will see you in the next episode!