



HEALTH & GREENSPACE
Greener Cities, Healthier Communities



European Union
European Regional Development Fund



PRESENTATION TO CLIMATE ACTION, BIODIVERSITY AND ENVIRONMENT SPC

13TH APRIL 2021



URBACT method

Integrated + Participative x Transnational Exchange =
Sustainable Urban Development

- Integrated approach to solving complex urban issues
 - Policy/ Sector
 - Horizontal
 - Vertical
 - Territorial
 - Hard and soft investments
- Participative approach: involving all local stakeholders
- Transnational exchange & Learning: building networks of cities



Partners

- Lead Partner: Budapest 12th District 
- Espoo, Finland 
- Santa Pola, Spain 
- Suceava, Romania 
- Breda, Netherlands 
- Tartu, Estonia 
- Poznan, Poland 
- Messina, Sicily 
- Limerick, Ireland 



Lead Expert: Tamas Kallay



HEALTH & GREENSPACE

*Greener Cities,
Healthier Communities*

The objective:

To support and enhance the provision of quality green infrastructure in urban areas for their health benefits.

Thematic Areas:

- Theme 1: Heat Stress
- Theme 2: Air Quality and Noise
- Theme 3: General Impacts on Physical and Mental Health
- Theme 4: Lifestyles, Social Function and Physical Activities

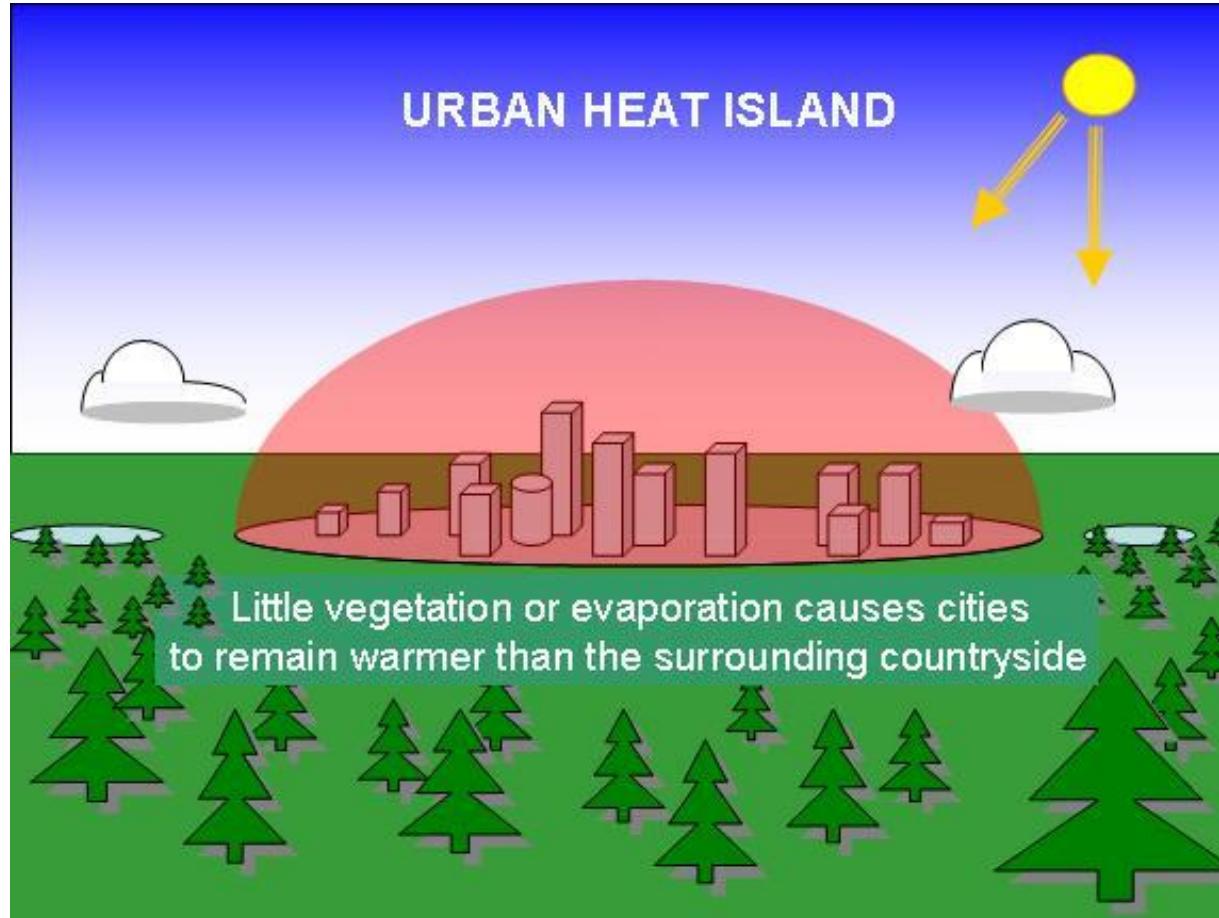


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Theme 1: Heat Stress





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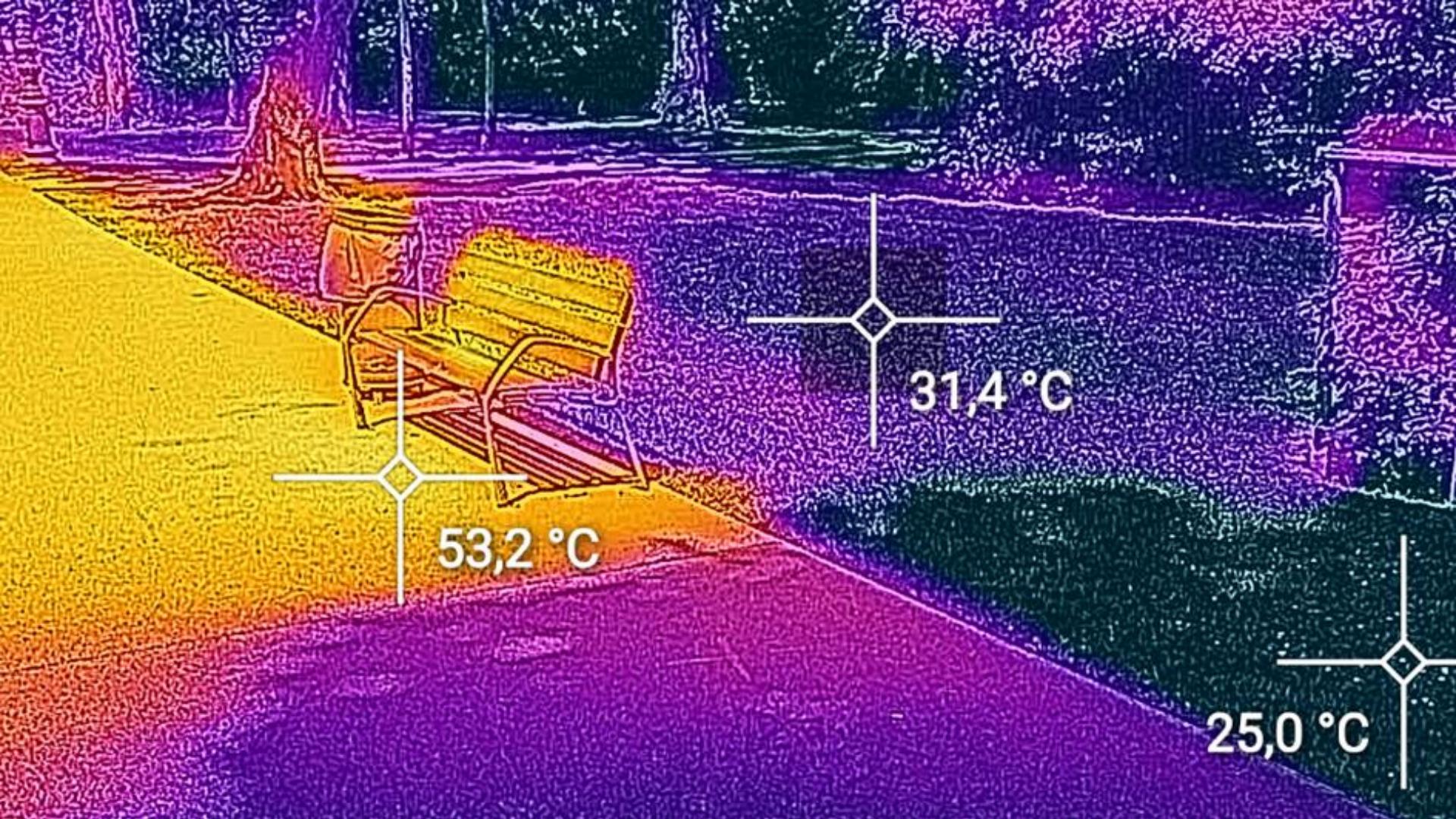




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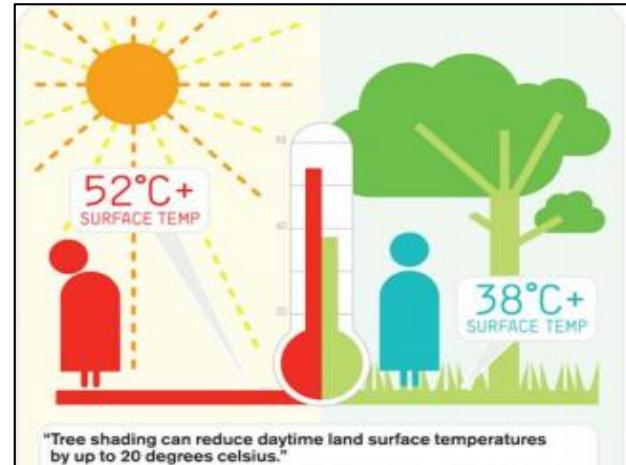
URBACT
Driving change for
better cities





Potential Actions to Reduce Heat Stress

- establishment of plant-covered shade structures;
- development of cooling routes,
- street Trees
- alignment of parks to take advantage of air-flows;
- increasing greenspace fraction,
- green roofs, green walls





Theme 2: Air Quality and Noise





Air Quality



Air pollution, principally caused by NO₂ and PM_{2.5} is now the **leading environmental cause of mortality world-wide**, causing around 4.2 million premature deaths a year. (400,000 in the EU and 1,200 in Ireland)

Source: World Health Organisation

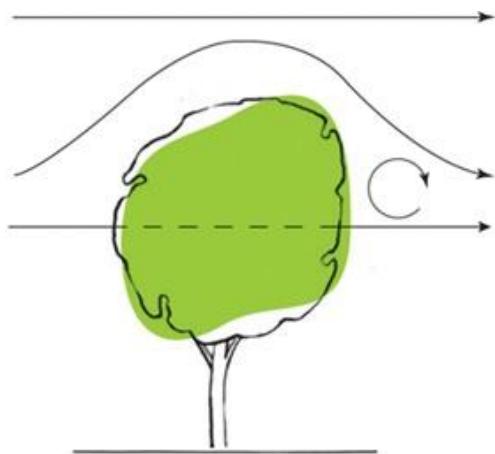


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Dispersion



Source: Hewitt, C. N. et al

- Trees and hedges provide obstacles to the flow of air, introduce turbulence and increase dilution.
- An average 8% reduction can be achieved in ground-level concentration of $PM_{2.5}$ due to the dispersive effect of trees.



Noise

‘Environmental noise leads to a disease burden that is second in magnitude only to that from air pollution, among environmental factors in Europe’.

Source: World Health Organisation 2011:





Potential Actions: Air Quality and Noise

- Planting trees
- Vegetated Stips and buffers
- Green walls
- Green Roofs
- Quiet amenity spaces



Ted Russell Park, Condell Road, Limerick



Theme 3: General Impacts on Physical and Mental Health





Physical health

People who spend more time in green spaces have:

- reduced levels of the stress hormone cortisol
- lower heart rate
- reduced risk of coronary heart disease
- lower blood pressure
- lower cholesterol
- reduced risk of type II diabetes
- reduced all-cause mortality and death from heart disease



Westfields Wetland

Source: Journal Environmental Research



Physical health

Just enjoying a view of nature can provide physical benefits:

- quicker recovery
- less pain medication required
- fewer post-surgical complications

Source: The Ulrich study (1981)

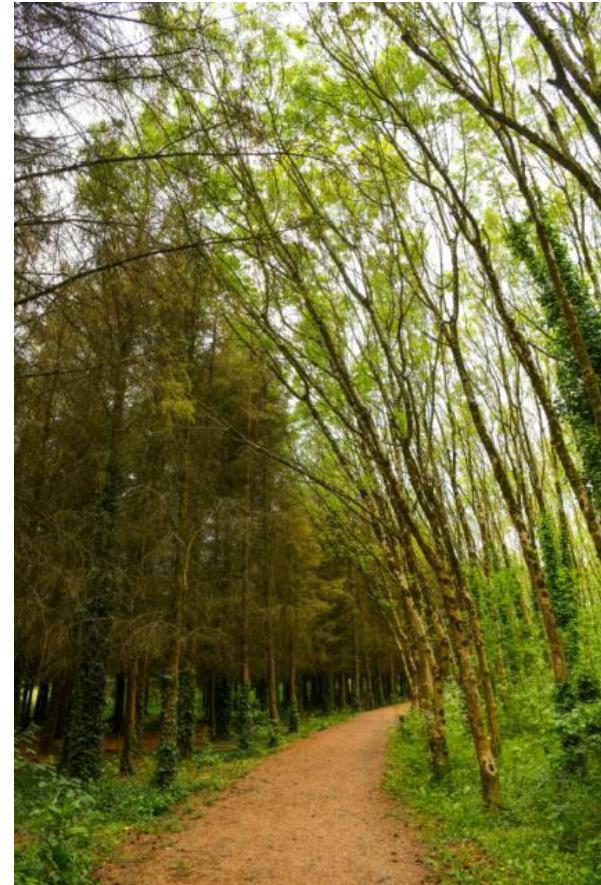




Mental health

The health benefits of the contact with the natural environment and greenspace include:

- improved general mood and attitude
- stress reduction
- better mental functioning
- improved mindfulness and creativity
- positive impacts on **anxiety, depression,**



Baggot Estate, Limerick

Potential Actions: General Impacts on Physical and Mental Health

- establishing therapeutic garden;
- development of 'health-walk routes';
- establishing areas for relaxation and reflection,
- courtyard planting



Community Garden and wildflower meadow, Baggot Estate



- Theme 4: Lifestyles, Social Function and Physical Activities



Physical Activity and Greenspace

Access to green space raises levels of physical activity.

People who live within 800 metres of a park get 50% of their physical activity while at the park. People who live further away get only 16% of their physical activity while at the park.



Canal Bank Greenway, Limerick



Social Function of Greenspace

Parks and green spaces are places to connect with other people in the community, and improve social well-being.

- Studies show that people who connect with nature feel less isolated. They form connections with neighbours, and aggression and crime decrease.
- People living next to green spaces know more of their neighbours, report a stronger feeling of belonging, and are more supportive of each other.



Westfields Resident's Group, Limerick
© Sean Ryan

Potential Actions: Lifestyles, Social Function and Physical Activities

- development of areas for social interaction,
 - Community Gardens
- developing outdoor places for education and learning
- facilitated activities within urban green space such as:
 - orienteering routes
 - geocaching trails
 - family days,
 - markets,
 - guided walks;
 - developing facilities supporting physical activities in green spaces (running tracks, bike paths, outdoor gyms, playing fields);
 - appointment of physical activity managers.



Griston Bog Outdoor Class Room, Ballylanders, Co. Limerick



Partner's Focus Areas

	Theme 1 Heat Stress	Theme 2 Air Quality & Noise	Theme 3 General impacts on Physical & Mental Health	Theme 4 Social aspects & Physical Activities
Breda	•	•		•
Budapest	•	•	•	•
Espoo		•	•	•
Limerick		•	•	•
Messina		•	•	•
Poznan	•			•
Santa Pola	•			•
Suceava		•		•
Tartu	•	•		•



URBACT Local Group (ULG) Role

Co production of the Integrated Action Plans and strengthening the capacity of local stakeholders

- giving the benefit of experience and knowledge
- analysing local problems and challenges and identifying appropriate solutions
- feeding in learning from transnational exchange
- contributing to transnational exchange
- communicating results at local level
- helping identify and implement small scale actions
- developing IAP
- take part local Study Visit





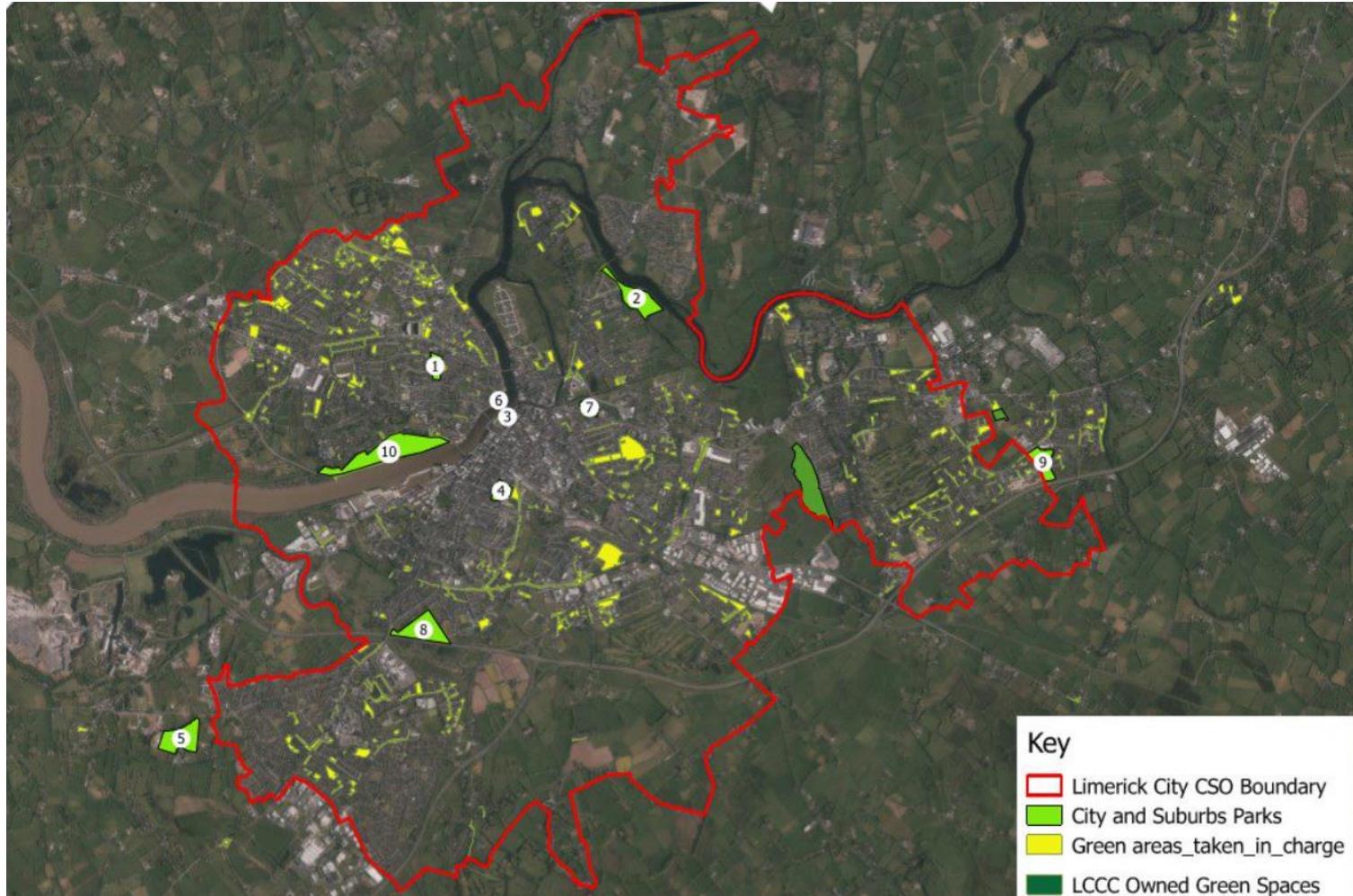
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Potential Focus Areas in Limerick



Limerick Greenspace





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Limerick's Challenges

- Large area of greenspace per capita 73m² compared to EU average of 18.5
- Residential greenspace lacking in amenity or environmental value and under or unused.
- Fragmented and disconnected – does not create either mobility routes or ecological corridors.
- Low use of nature based solutions to solve engineering problems and low level of street green.
- Low number of street trees and low tree canopy cover
- Uneven access to quality greenspace.
- Limited opportunities for social interaction in greenspace
- Lack of animation of greenspace.
- Antisocial behavior
- The weather!



Focus Areas in Limerick

- Public Parks
 - Baggot Estate
 - Mayorstone Park
- Residential Greenspace
 - Ballynancy
 - Moyross
 - Johnsgate
 - Garryowen
 - Private housing estates
- Mt St Lawrence



Greenspaces in Ballynancy, Limerick



Baggot Estate (Portland Park)

- Orienteering
- Community garden
- Biodiversity areas
- Forest school
- Natural play areas
- Additional paths



Programme

- Draft Integrated Action Plan by Dec 2021
- Final Plan June 2022
- End of project event Limerick August 2022



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Thank you for your time



Westfields Wetland
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