

# Periurban Parks



- In Europe, nearly **73%** of the population lives in **urban areas** ...



London

and this is projected to increase...





## Urbanisation main problems

- ✧ EXCESS OF HEAT
- ✧ AIR POLLUTION
- ✧ NOISE POLLUTION
- ✧ SEDENTARISM
- ✧ STRESS



## THE CHALLENGE:

How can urban planners and administrators ensure that **CITIES** are **ECONOMICALLY, SOCIALLY** and **ENVIRONEMENTALLY SUSTAINABLE**, **RESILIENT** and capable of providing a **GOOD QUALITY OF LIFE** for citizens ?





PERIURBAN PARKS can help to meet these challenges



PERIURBAN PARKS are natural or rural spaces located in close proximity to towns



Urban Protected Area

Urban Forest

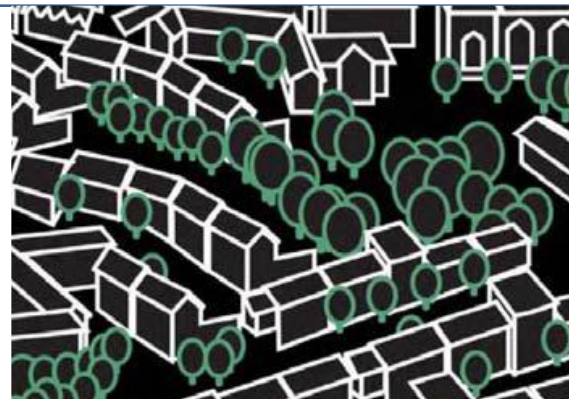
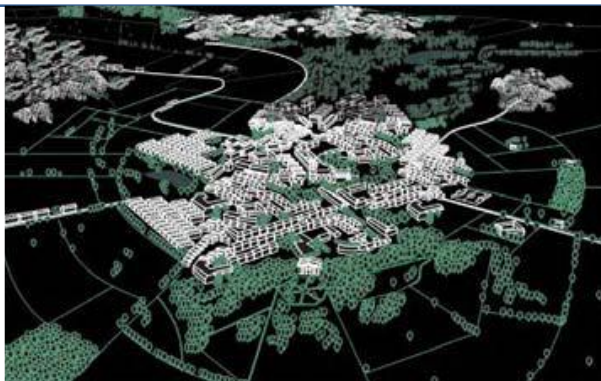
Large Urban Park

Green Space

Recreational Park

Nature Discovery Park





**GREEN INFRASTRUCTURE** is a strategically **planned network of natural and semi-natural areas** with other environmental features designed and managed to deliver a wide range of **ecosystem services**.



### Forest parks



ATHENS - Mount Hymethus

### Fluvial parks



LILLE métropole - Espace nature

### Alluvial plains



LYON - Grand Parc Miribel Jonage

### Coastal salt marshes



VALÈNCIA - Parque Devesa-Albufera

+ Human intervention / land planning





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### Agro-environmental parks



BARCELONA – Parc agrari Baix Llobregat

### Reforested parks



LISBOA - Parque Florestal Monsanto

### Renatured green city parks



MILANO – Parco Nord

### Green - belts



VITORIA – Anillo verde

+ Human intervention / land planning



Proximity: 0-15 km

Accessibility: 15-33 min.

By car



On foot



By bike



LE MANS - Arche de la nature

By metro / tramway / train



STRASBOURG - Forêts rhénanes

By public bus



LYON – Grand Parc Miribel Jonage

1° in private vehicles



2° By foot



3° By bike



4° By public transport







	National Park	Periurban Park
DESIGNATION	STATE	LOCAL – Municipal, supramunicipal
LOCALISATION	REMOTE	URBAN FABRIC
PROTECTION	STRICT - HIGH	MEDIUM - VARIABLE
STATE OF CONSERVATION	GOOD PRISTINE NATURE	DEGRADED- RESTAURED- GOOD
BIODIVERSITY	HIGH RICH EMBLEMATIC SPECIES (LARGE CARNIVORS)	MEDIUM RICH – HIGH RICH
MANAGEMENT	CONSERVATION PRIORITY	BALANCE ENVIRONMENTAL AND SOCIAL DIMENSIONS



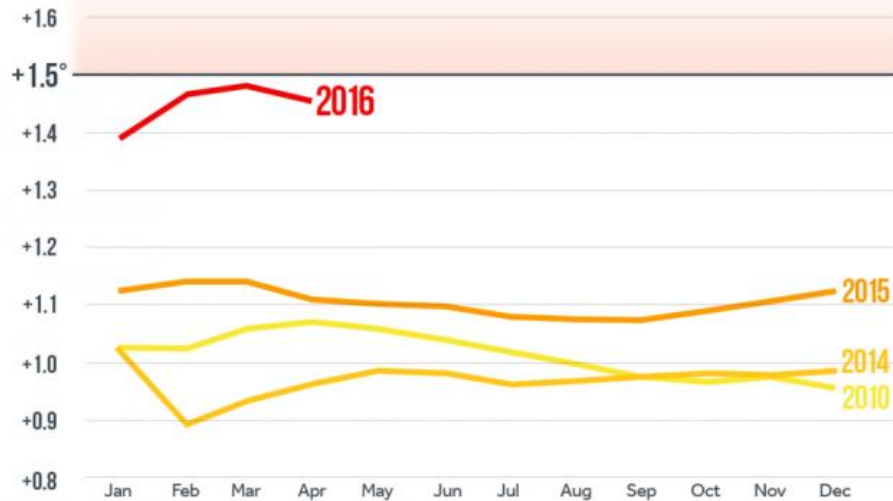
How can PERIURBAN PARKS contribute to providing a GOOD QUALITY for citizens?





## On the Edge of 1.5°C

Global year-to-date anomalies from 1881-1910 baseline



Source: NASA GISS and NOAA NCEI global temperature data averaged and adjusted to early industrial baseline (1881-1910). Data as of May 2016.

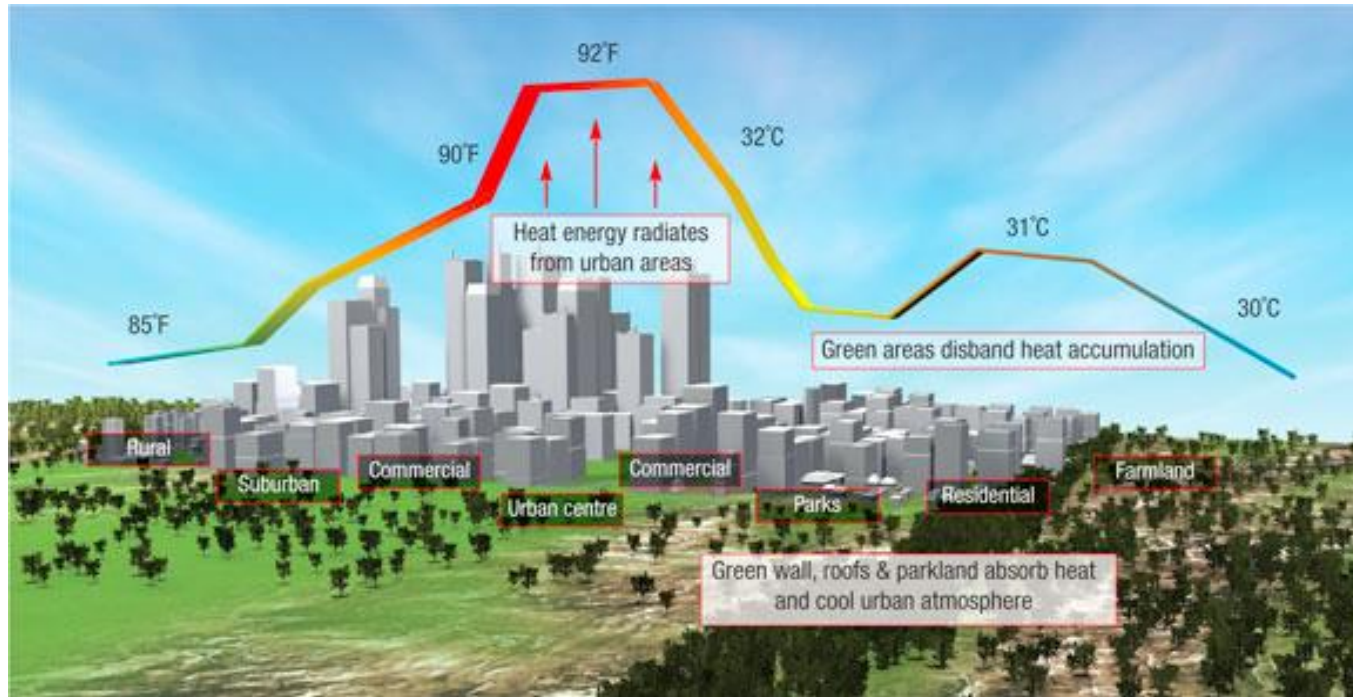
CLIMATE CENTRAL

- The frequency and intensity of **HOT WAVES** have increased due to **climate change**
- Heat waves cause **PREMATURE DEATHS**





- In cities, this effect is **intensified** further due to the urban heat island effect

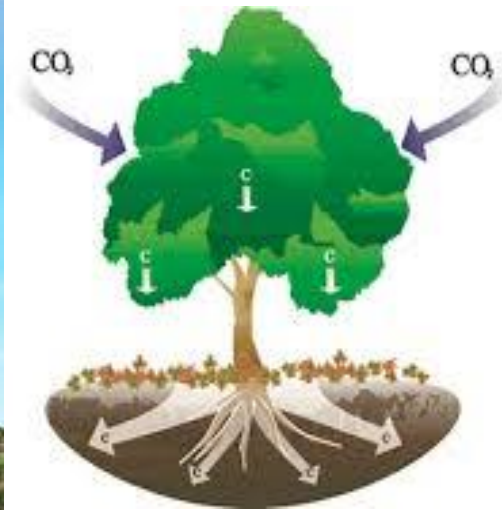
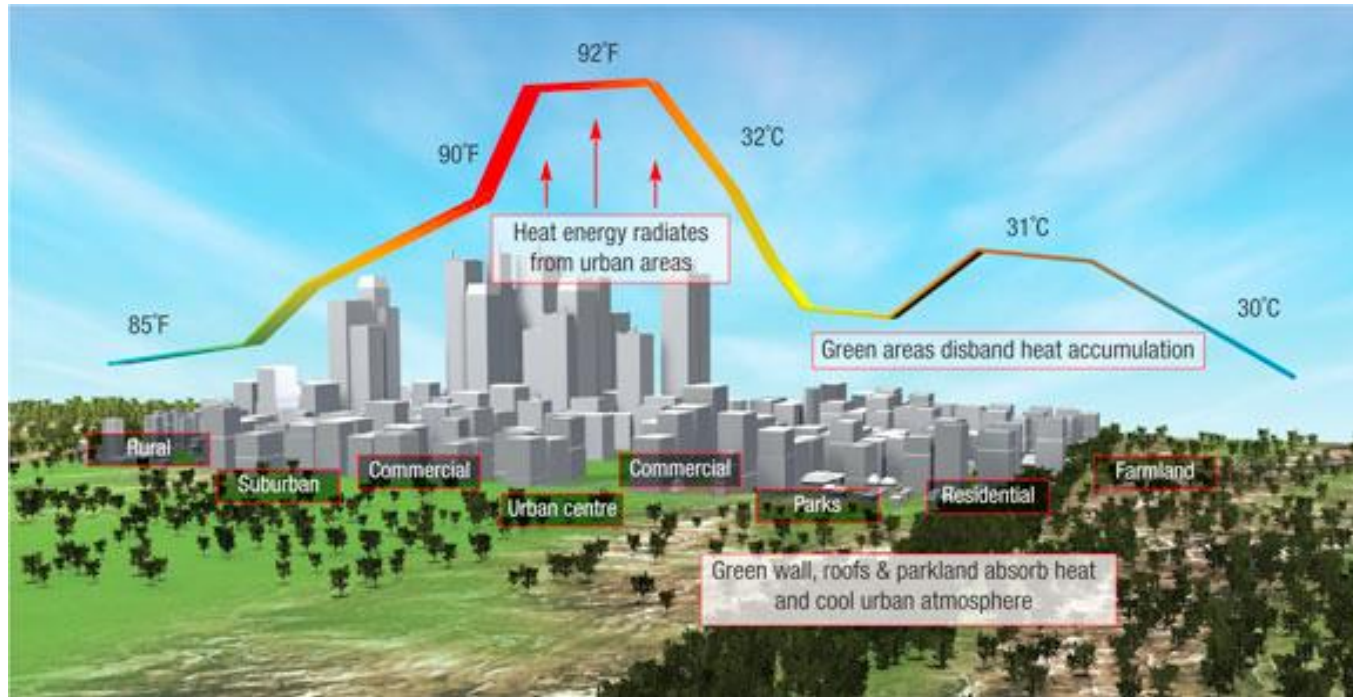


- ✓ **Green areas** are up to **2° C – 4° C cooler** than urban areas (Evapotranspiration and shadowing) => Improve Thermal Comfort => Ventilation channels of cool air





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✓ Green areas can be up to **2° C – 4°C cooler** than urban areas

✓ Trees & soil absorb CO<sub>2</sub> and other greenhouse gases => MITIGATE CLIMATE CHANGE



- The number and intensity of **heavy precipitations** is expected to increase causing **catastrophic floods**



- The number and intensity of **heavy precipitation** events is expected to increase in many parts of Europe causing **catastrophic floods**

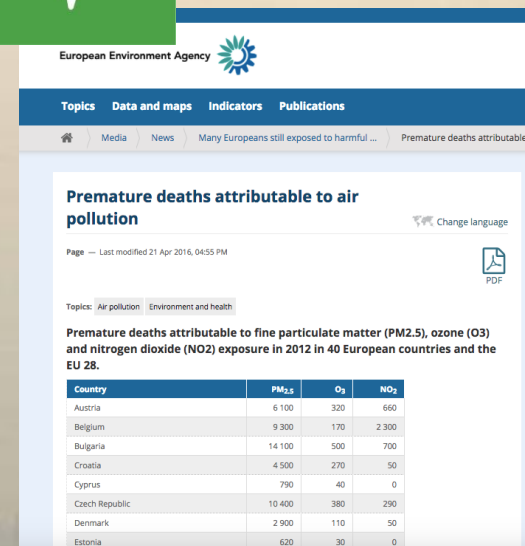


✓ Non-sealed areas allow for **RECHARGE OF GROUNDWATER** => reduce the incidence of floods

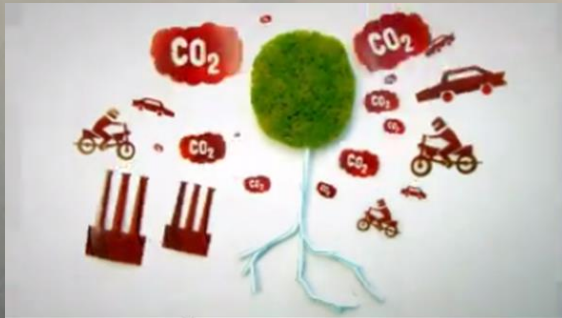




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- 7 million **PREMATURE DEATHS** annually linked to air pollution



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- ✓ Average reduction of **PARTICULATE MATTER (PM)** near a tree is between **7% and 24%**.



- Excessive NOISE can affect our quality of life

✓ Trees abate NOISE POLLUTION







- Worldwide **OBESITY** has more than doubled since 1980 due to **REDUCED MOBILITY** and **UNHEALTHY NUTRITION**
- 41 million children** under the age of 5 were **OVERWEIGHT** or obese in 2014.



✓ PERIURBAN PARKS gives greater opportunities for **EXERCISE** on a **DAILY BASIS**

✓ Opportunity for Km0 organic food





- **MENTAL DISORDERS** account for **12%** of the global diseases



### ✓ NATURE can have a **RESTORATIVE EFFECT** on the mind

- ❖ Hartig, T., Evans G.W., Jamner L.D., Davis D.S., and Gärling T. (2003). 'Tracking restoration in natural and urban field settings.' Journal of Environmental Psychology 23, 109-123.<sup>9</sup>
- ❖ Biol Lett. 2007 Aug 22;3(4):390-4. Psychological benefits of greenspace increase with biodiversity. Fuller RA1, Irvine KN, Devine-Wright P, Warren PH, Gaston KJ
- ❖ Payam Dadvand et al. **Green Spaces and Cognitive Development in Primary Schoolchildren; A Prospective Study.**PNAS, June 2015



✓ PARKS are places that allow for social relation and cohesion





Nature experience  
Environmental education







✓ **PERIURBAN PARKS** are places for private economic activities



**Bcn Advisors**  
Inmobiliaria de lujo y exclusividad

RESIDENCIAL COMERCIAL INVERSIONES RELOCATIONS PROPIETARIOS

VALORAR TU PROPIEDAD

ENCUENTRA

Zona:

Tipos de Inmueble:

Operación:

Con o sin muebles:

Habitaciones:

Precio Mínimo:

Precio Máximo:

Número de Referencia:

**BUSCAR**

PROPIEDADES SIMILARES

Exclusiva propiedad situada en la exclusiva zona residencial de Vallbona

**CASA DE DISEÑO CON VISTAS A COLLSEROLA**

Precio: 1.200.000 €

Superficie construida: 488 m<sup>2</sup>

Superficie de la terraza: 20 m<sup>2</sup>

Número de dormitorios: 4

Baños: 5

Zona: Sant Cugat / Valles

Ref.: BCN03746

Tipos de operación: Venta

MAPA

Mira-sol

Vallbona

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**3** GOOD HEALTH  
AND WELL-BEING

- Improve PHYSICAL HEALTH
- Restaure MENTAL HEALTH
- Remove pollutants => CLEAN AIR
- Abate Noise pollution

**8** DECENT WORK AND  
ECONOMIC GROWTH

- Opportunities for GREEN JOBS
  - Km0 organic agriculture
  - Sustainable ecotourism

**11** SUSTAINABLE CITIES  
AND COMMUNITIES

- Make cities RESILIENT to natural disasters = > Infiltrate Water  
=> REDUCE FLOODS

**13** CLIMATE  
ACTION

- MITIGATE Climate Change => Carbon sequestration
- ADAPT to Climate Change => Cool down temperatures

**15** LIFE  
ON LAND

- BIODIVERSITY CONSERVATION







Děkuji!

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**EUROPARC**  
F E D E R A T I O N



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