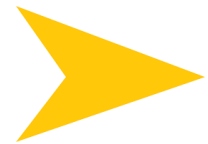


Teachers Training Workshop

Belgrade, June 16-17, 2022



SESSION 2: OBJECTIVES AND METHODOLOGIES

The Teaching Methodological guidelines: OVERVIEW

Stefania La Grutta, Velia Malizia, Salvatore Fasola, Anna Bonomolo



OUTLINE



DOCUMENTS FROM INTERNATIONAL SCENARIO



SUGGESTED OBJECTIVES



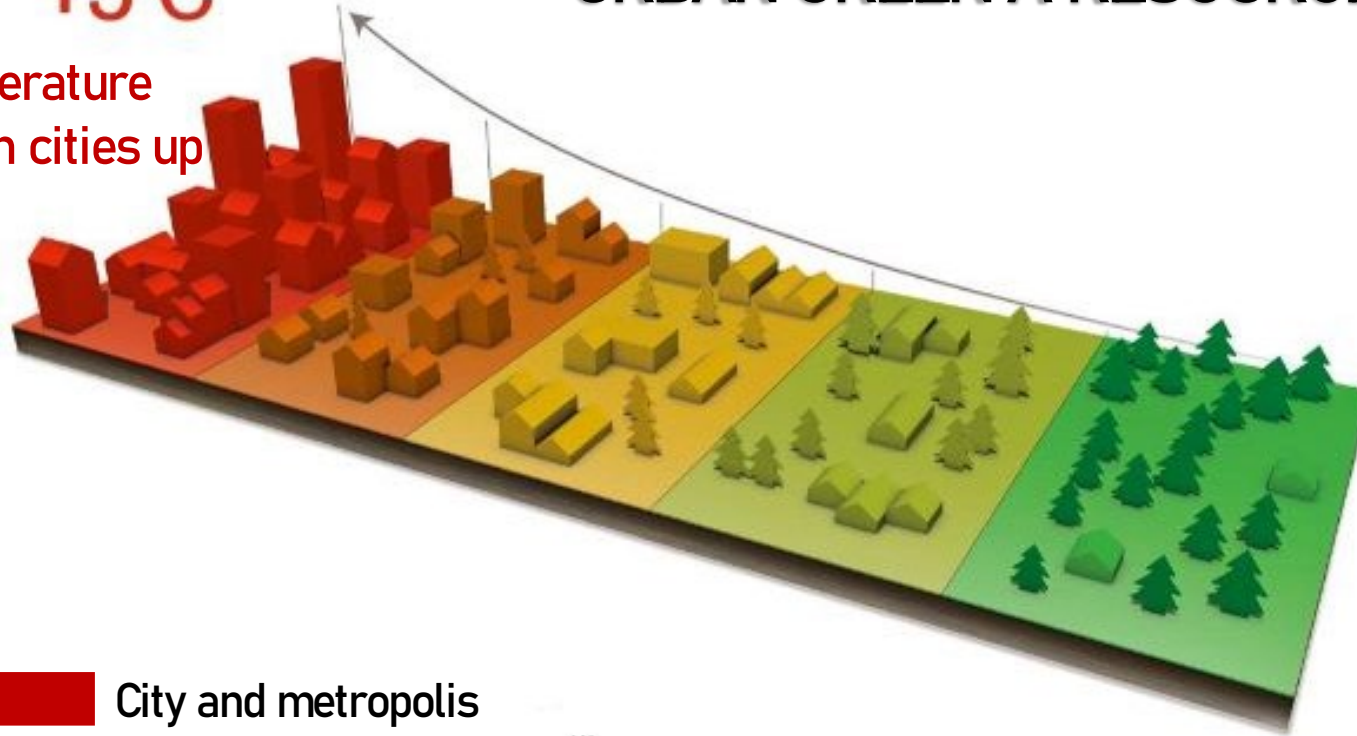
HEALTH MITIGATION INTERVENTION



URBAN GREEN A RESOURCE FOR HEALTH

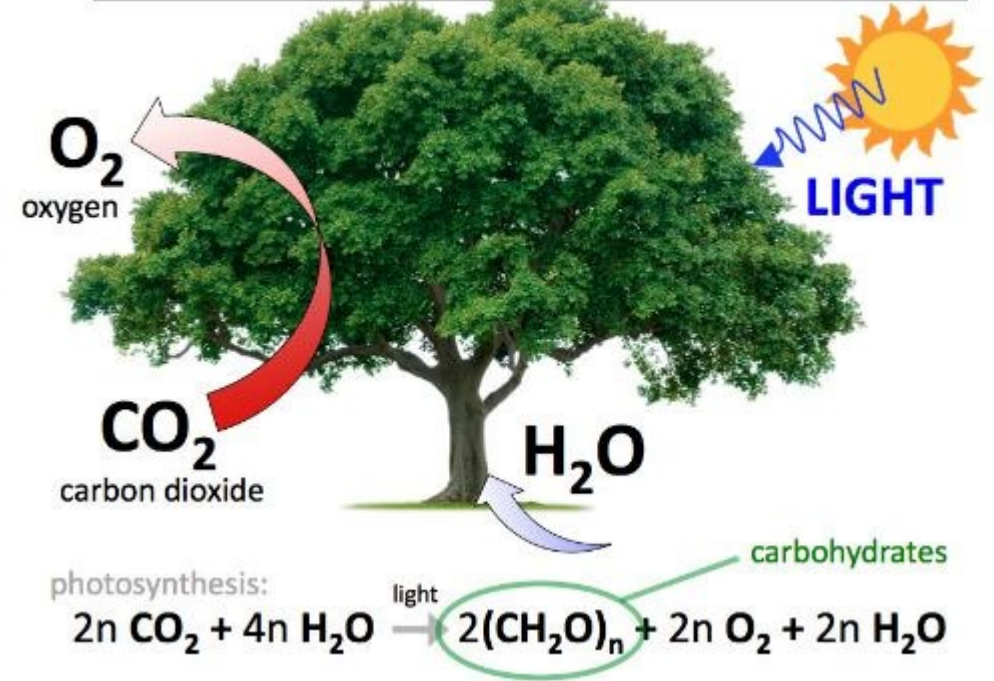
+5°C

Temperature rise in cities up to

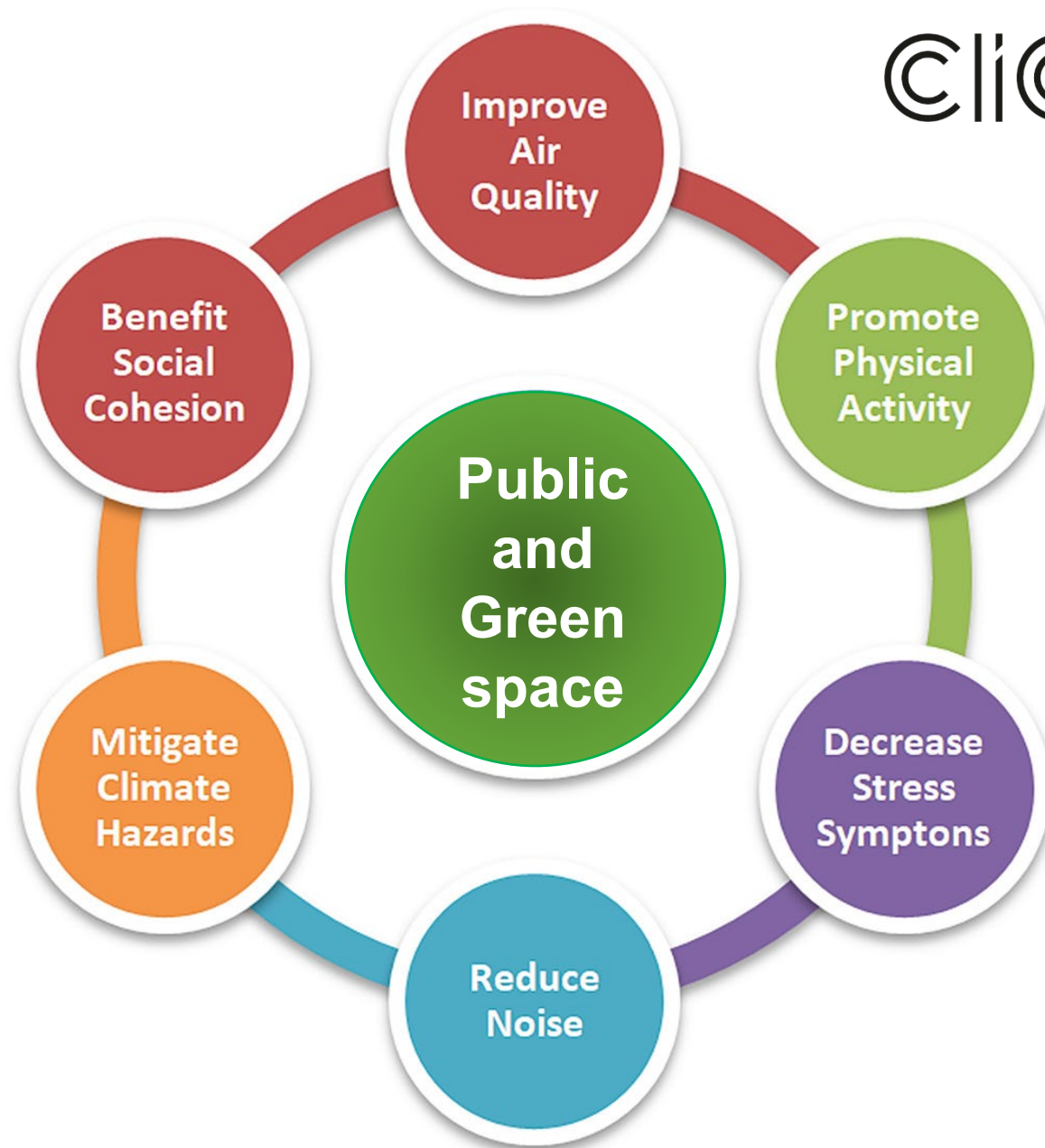


- City and metropolis
- Urban centers with medium population density
- Urban suburbs with parks and surrounding greenery
- Rural areas, crops - not very populated
- Natural areas scarcely or not at all populated

Carbon Dioxide & Carbon Fixation



URBAN GREEN A RESOURCE FOR HEALTH



URBAN
GREEN
A RESOURCE
FOR HEALTH



HEALTH MITIGATION INTERVENTIONS

Total and average annual **reduction of deaths attributable** to a temperature reduction of 1.3°C of the specific city average temperature in the period

Total and average annual **reduction of deaths attributable** to a temperature reduction of 2°C of the specific city average temperature in the period

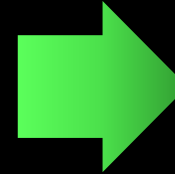
Total and average annual **reduction of deaths attributable** to a temperature reduction of 1.3°C and 2°C of the specific city average temperature in the period

EXAMPLE

Selected area for NBS interventions

Selected area: examples of critical issues

- heavily built up area
- poor vegetative cover
- high prevalence of population > 65 years
- presence of pollutant production activities



What to do: examples of activities

- analysis of the actual state of the area using the ENVI-met microclimatic software
- survey of plant species present and selection of tree, shrub and herbaceous species to be included
- elaboration of different cooling scenarios
- simulation through ENVI-met of the scenes with quantification of the benefits (temperature, relative humidity, etc.)



EXAMPLE

Selected area for NBS interventions

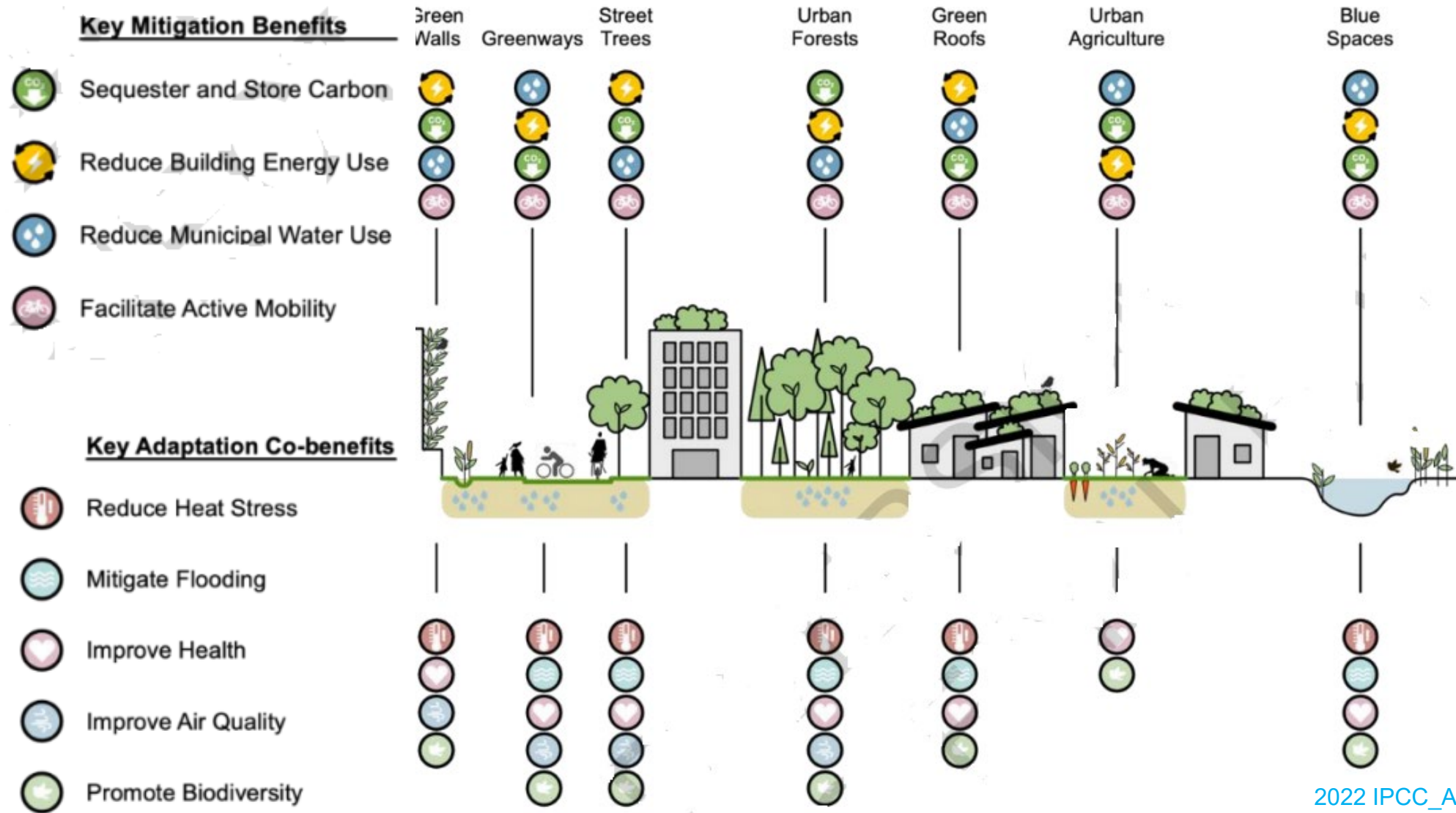
Selected area:
examples of
critical issues

- heavily built up area;
- poor vegetative cover;
- high prevalence of population > 65 years;
- presence of pollutant production activities.

What to do:
examples of
activities

- analysis of the actual state of the area using the ENVI-met microclimatic software;
- survey of plant species present and selection of tree, shrub and herbaceous species to be included;
- elaboration of different cooling scenarios;
- simulation through ENVI-met of the scenes with quantification of the benefits (temperature, relative humidity, etc.).

Potential
 integration of
 various **green**
 and **blue**
 infrastructure
 strategies within
 an urban system



2022 IPCC_AR6_WGIII_FinalDraft_Chapter08.pdf

Urban forests and street trees provide the greatest mitigation benefit because of their ability to sequester and store carbon while simultaneously reducing building energy demand.

	Urban Green and Blue Infrastructure	Mitigation Benefits	Adaptation Co-benefits	SDG Linkages
Urban Forests		<ul style="list-style-type: none"> CO₂ sequestration (Green bar) Energy savings (Yellow bar) Water cycle (Blue bar) Bicycle usage (Pink bar) 	<ul style="list-style-type: none"> Healthcare (Red icon) Water (Blue icon) Heart (Pink icon) Water cycle (Blue icon) Green leaf (Green icon) 	
Street Trees		<ul style="list-style-type: none"> CO₂ sequestration (Green bar) Energy savings (Yellow bar) Water cycle (Blue bar) Bicycle usage (Pink bar) 	<ul style="list-style-type: none"> Healthcare (Red icon) Water (Blue icon) Heart (Pink icon) Water cycle (Blue icon) Green leaf (Green icon) 	

2022 IPCC_AR6_WGIII_FinalDraft_Chapter08.pdf

➤ The assessments of mitigation benefits are dependent on context, scale, and spatial arrangement of **each green infrastructure type** and their proximity to buildings.

➤ Local implementations of **urban green infrastructure** can pursue toward **inclusive sustainable urban planning** (SDG 11.3) and the provision of safe, inclusive and accessible green and public spaces for all.

KEY POINTS

OUTLINE



DOCUMENTS FROM INTERNATIONAL SCENARIO



SUGGESTED OBJECTIVES



HEALTH MITIGATION INTERVENTION



CONCLUSIONS



CONCLUSIONS

- The importance of **urban green infrastructure** for reducing the total warming in urban areas due to its local cooling effect on temperature and its **benefits for climate adaptation**.
- **Urban green infrastructure** involves the protection, sustainable management, and restoration of natural or modified ecosystems while simultaneously providing **benefits for human well-being and biodiversity**.



CiC+HE

Thanks for your attention

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