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# SEARCH

SPORT EDUCATION FOR ACTIVE  
AND RESPONSIBLE CITIZENSHIP  
THROUGH HEALTH CARING





# MODULE 5

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## SMART SPORT CITIES



# **SEGMENT 4**

**Urban planning and physical activity**

# Mind Change

This new approach concerns not only major metropolitan cities but involves urban planning in different sized locations.

Offering citizens more pleasant, sustainable and healthy environments is a priority task for every administration. These benefits can be achieved by changing the way cities and urban settings are planned, designed, redeveloped and financed, and by changing the way they are used.

According to the Ellen McArthur Foundation, a sustainable and circular economic approach to governance can help in addressing important and urgent priorities such as:

- buildings energy efficiency
- smart Mobility
- economic development.

It is also consistent with the sustainable development goals of the Green Deal and the 2030 Agenda. However, it is important that all public and private stakeholders are involved.

# Interventions and targets

Taking into account areas for physical activity at all levels and for all age groups is one of the criteria for urban planning.

The accessibility of paths should take into account different users: from children to elderly people, from sportspeople to people with disabilities.

**Walkability** - increased use of walking, cycling and soft mobility paths to help reducing environmental impact.

**Green areas** - more green areas and parks designed for physical activity in contact with nature.

**Air and water quality** - better air and water quality allows practicing safe outdoor activities, fostering the use of public areas and social interactions.



# Urban planning and technology

Planning green spaces, safe paths and areas for physical activity can be enhanced by technology to ensure greater safety and better use and planning of spaces.

Healthcare app - possibility of communicating information to citizens and gathering information from citizens on the amount of activity performed during the day.

Time saving app - possibility to book spaces within facilities (gyms, playgrounds, etc.) or to attend sport events (e.g. marathons, walks, etc.) to plan your own physical activity.

Social app - a well-connected and interactive city enables efficient management of social contacts, encouraging the organization and planning of meetings and participation in events.

# Some examples

Many cities are currently testing innovative and original solutions for structuring their spaces in terms of sustainability.

We mention a few examples to underline how each place can embrace this change of mentality, while taking into account its culture, traditions and the enhancement of its natural environment.

**Amsterdam - cycle paths and Google bike**

**London - Historical parks and new suspended parks**

**Singapore - nature and technology**

**Milan - shared mobility**

**Zurich - security and artificial intelligence**

**Dubai - 3D buildings**



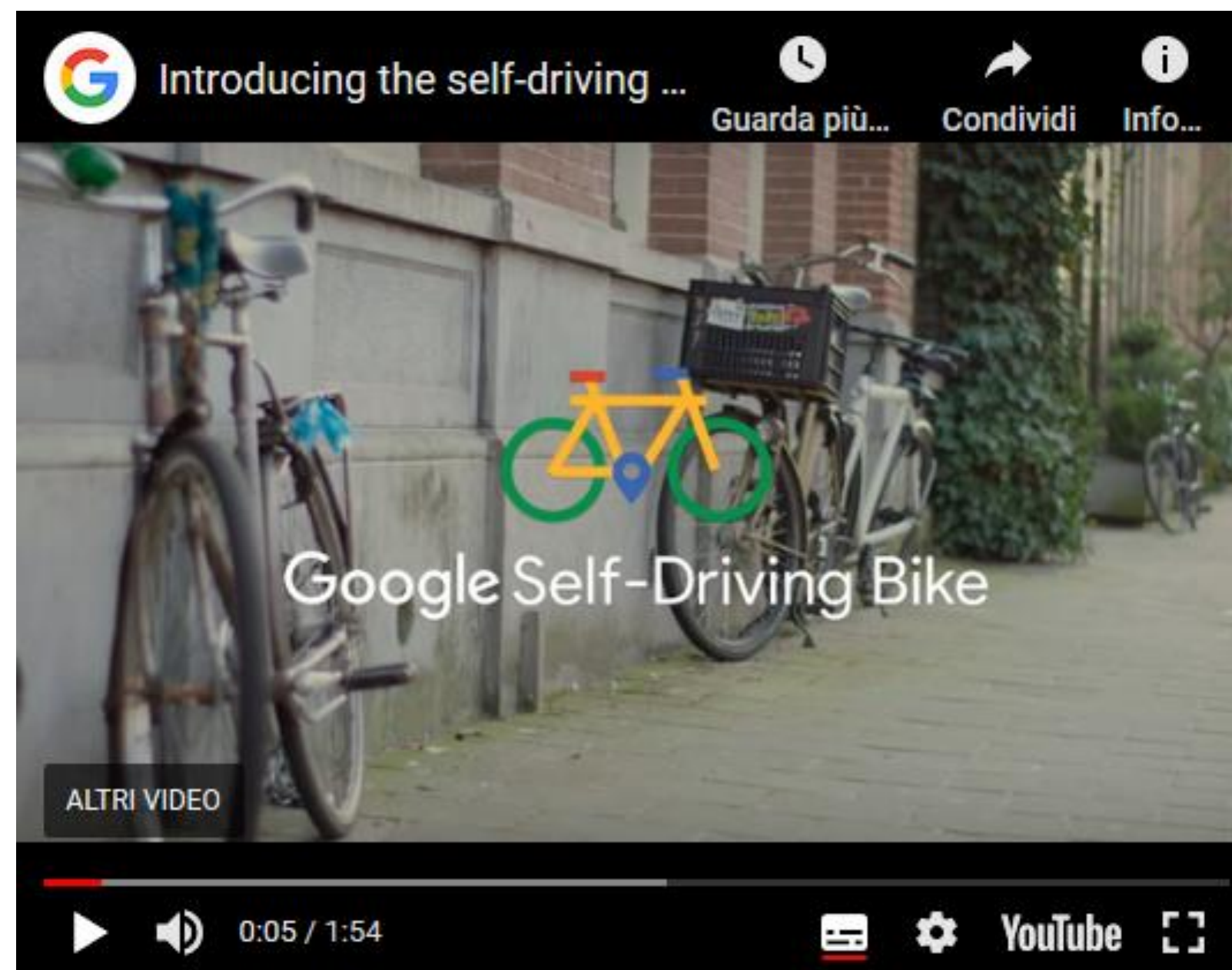
# Amsterdam and the cycle paths

**800,000 bikes**  
**63% of citizens using the bike every day**  
**A 500-km cycling paths**





# Google bike



<https://www.youtube.com/watch?v=LSZPNwZex9s>



# London and green areas

**47% of the surface is covered in green areas**  
**3 million gardens**  
**As many trees as citizens**





# London - The Tide

Suspended park situated on the Greenwich Peninsula  
5 km Circular suspended structure.  
Possibility of walking, practicing sports, attending shows





# Singapore: technology and nature

**Forest consisting of tree structures, with heights that range from 25 to 50 meters, over 160,000 plants of 200 different species.**

**101 hectares of park**

**Open from 5 a.m. to 2 a.m.**





# Milan and car sharing

**3,000 shared cars**  
**4,800 shared bikes**  
**+ 259% of electric and hybrid cars**





# Zurich- Precobs

**Moving safely in a protected environment within the traffic-free city center**

**Not only lighting and cameras but also prevention systems**

**Precobs (Pre-Crime Observation System) is a software used by the police since 2015 to prevent home burglaries.**





# Dubai - 2016 3D printed buildings



The world's first fully 3D printed office completed in Dubai. The 250 square meter building was built in 17 days with an overall cost of \$140,000. The special printer employed to build it, 6 meters high and 36 meters long, employed an automated robotic arm to implement the printing process. The initiative belongs to the Dubai 3D project, which aims at making the Emirati city a world leader in 3D printing. By 2030, 25 per cent of all new buildings throughout the state will be built with such technology (La Repubblica)



# Dubai - 2019 3D printed buildings



Robotic building company Apis Cor used its technology to create the world's largest 3D printed building that is a two-storey office building in Dubai.

Apis Cor completed the structure for the Dubai Municipality which has a height of 9.5 meters and a surface area of 640 square meters.

The company declares this is the largest 3D printed building ever built.



# Highlights

The cities of the future, supported by technology and data collection and analysis, will offer their citizens a higher standard of living. Public administrations should take these needs into account in urban planning.

New building and renovation technologies will reduce environmental impact by improving the infrastructure quality of cities.

Air quality, increased green areas, enhanced sustainable mobility, enhanced safety, and community interaction will provide citizens with functional spaces for physical activity and sporting events.

The development of technologies will also allow people monitoring their physical condition, measuring kilometers travelled, heartbeats, calories consumed, educating each individual to better know his or her own body and capacities.

Soft mobility paths will also enhance social and sharing dimension not only for young people but also for the elderly population.



# Exercise 4

Which of these examples did you prefer and why?

Could you describe a path where you live that could be enhanced?

Could you describe how?

Which strategy would you propose to encourage environmentally friendly mobility where you live?

If you were to run an advertising campaign to promote the use of more sustainable means of transport, which evidence would you use to persuade citizens?



# Keywords

**Planned**

**Healthcare app**

**Designed**

**Time saving app**

**Redeveloped**

**Social app**

**Funded**

**Sustainable  
development**

**Walkability**

**Green areas**

**Air quality**

**Water quality**





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