

Green Cities



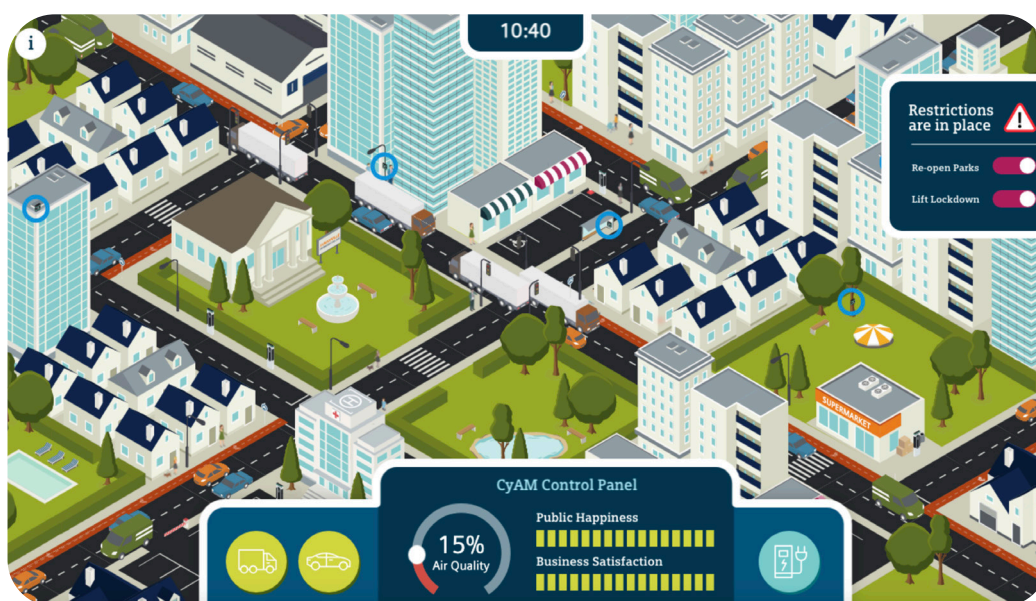
This simulation represents a city. The challenge for the player(s) is to manage the air quality within the city. The idea is that the air quality in the city is monitored using sensors which detect the build up of particulates and gaseous pollutants. Players have to trade off the need to protect people from pollution with allowing people to move around freely, which is not only more enjoyable but promotes economic activity. Retail businesses won't survive if people aren't allowed to go shopping.



Look at this screenshot. It shows a simulation in progress.

1

Look at the performance indicators. How well is this player doing?



2

Suggest why the air quality is at the level it is and how this might have been achieved.





- 3 Happiness and satisfaction ratings are very different though. Suggest why this might be.
- 4 Explain why applying or easing off on controls is tricky and leads to a compromise.
- 5 This model shows how short-term responses can be made. Suggest what sort of longer-term developments might be implemented in the city.
- 6 This resource shows how a digital model can be used to represent a city and how its air quality can be managed. Suggest advantages and disadvantages to using something like this to train city managers with.



Why this technology is important:

Air pollution is a critical factor in many cities. It affects the health of a wide range of people but especially the young and the elderly. It affects the health of a wide range of people, particularly the young and the elderly, who are more vulnerable to its effects. This not only causes immediate health problems but also contributes to long-term health issues for these groups. Air quality sensors can detect a range of pollutants and warn city managers if there is a problem. Having the evidence to base decisions on makes it easier to protect people without imposing unnecessary restrictions. It is also important to appreciate that cities depend upon economic activity as well as healthy conditions.

