

Smart green cities

Project from school «Moðurmál»



Smart city = green city?

A smart green city is a combination of a smart city, which is aimed at the development of the urban environment, management, economy and society. When a green city is inclined towards environmental responsibility: clean air and water conservation, environmental justice and human waste recycling.





- Reducing resource usage
- Reducing traffic jams
- Improving waste management techniques
- Informed investments are ideal

Reducing resource usage

Many people are already familiar with smart meters that track the amount of energy used in homes. Those gauges also typically give information about fluctuations in energy use over time. Then, people can proactively make changes to make utility bills more manageable and protect the planet at the same time.





- Reducing resource usage
- Reducing traffic jams
- Improving waste management techniques
- Informed investments are ideal

Reducing traffic jams

Getting stuck in a traffic jam is an unpleasant experience for drivers. And heavy traffic exacerbates problems with vehicle emissions, which contribute to global warming and harm the planet in other ways. In this regard, we can use special applications that help find another way.





- Reducing resource usage
- Reducing traffic jams
- Improving waste management techniques
- Informed investments are ideal

Improving waste management techniques

Globally, there is 3.5 million tons of waste generated daily, and that number is rising. So, for a smart city to get serious about environmental sustainability, it cannot overlook practical ways to curb waste production, mainly by recycling. Some sensors might track the fill levels of recycling bins, letting crews know when to empty the containers.





- Reducing resource usage
- Reducing traffic jams
- Improving waste management techniques
- Informed investments are ideal

Informed investments are ideal

The areas covered above are some of the most pressing environmental issues faced in smart cities around the world. But it's essential for planners to invest wisely and in ways that are tailor-made for their cities rather than merely following trends.



Green City: Reykjavik, Iceland



Renewable Energy in Iceland

Iceland has pioneered the use of geothermal power for citywide district heating. Reykjavik meets nearly all its electricity and heating needs from renewable resources (from hydroelectric and geothermal sources).

For electricity, Iceland sources about 73% from hydroelectricity and about 27% from geothermal. For heating Iceland sources geothermal energy. Iceland's renewable energy production has nearly made the country energy independent.



Hydropower Plant in Iceland

Iceland has the largest hydroelectric power station in Europe. The dam is 193 meters high and 730 meters long. The power of this hydroelectric power station is enough to power the only aluminum plant in Iceland. The Kárahnjúkar Dam is the centerpiece of the five dams and the largest of its type in Europe.

Kárahnjúkar



Conclusion

In fact, today the future of cities is being designed for several decades to come, this is the product of our own intellectual and organizational work, the search for a compromise and the consent of all parties, the formation of terms of reference and our own solutions. And here it is necessary to consider both the already existing foreign experience and our own specifics, combining green technologies and new opportunities for digitalization and the transition to a smart city.

**Thank you for
your attention**

