

The development of public lightning by wind energy in Ceuti



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GEOLIN

GENERAL ELECTRIC

The basis of the case study

- My task: The investigation of the possibility of LED lightning installment powered by wind farm in a small Spanish town



Considerations, researches

- **Why renewable energy source?**
 - Available for everyone, cost effective, eco-friendly, there is no fear of run-down
- **Why wind power?**
 - Biomass: it is simple to install, but more expensive
 - Solar energy: modern, but expensive, and space-consuming
 - Wind-power: it is the most effective in point of the town



Calculations, planning

- The development of public lighting would go off with cost effective LED lamps
- Considering the costs of the installment:
 - about €100,000 would be annually saved for the local government
- Not a short run investment
 - return of the costs:
7-10 years



Development of the concept

- Not only the public lighting, but the supply of the whole town's energy needs by wind farms
- 15-18 wind farms (costly investment)
- An investment in the long run, which would produce profit after 14-16 years, but the town would be totally power-supplied in the future

Resources

- www.alternativenergia.hu
- http://www.innoteka.hu/cikk/a_vilagitastechnika_uj_jelszava_led_it_be.1102.html
- Further resource: My case study

**Thank you for your
attention!**