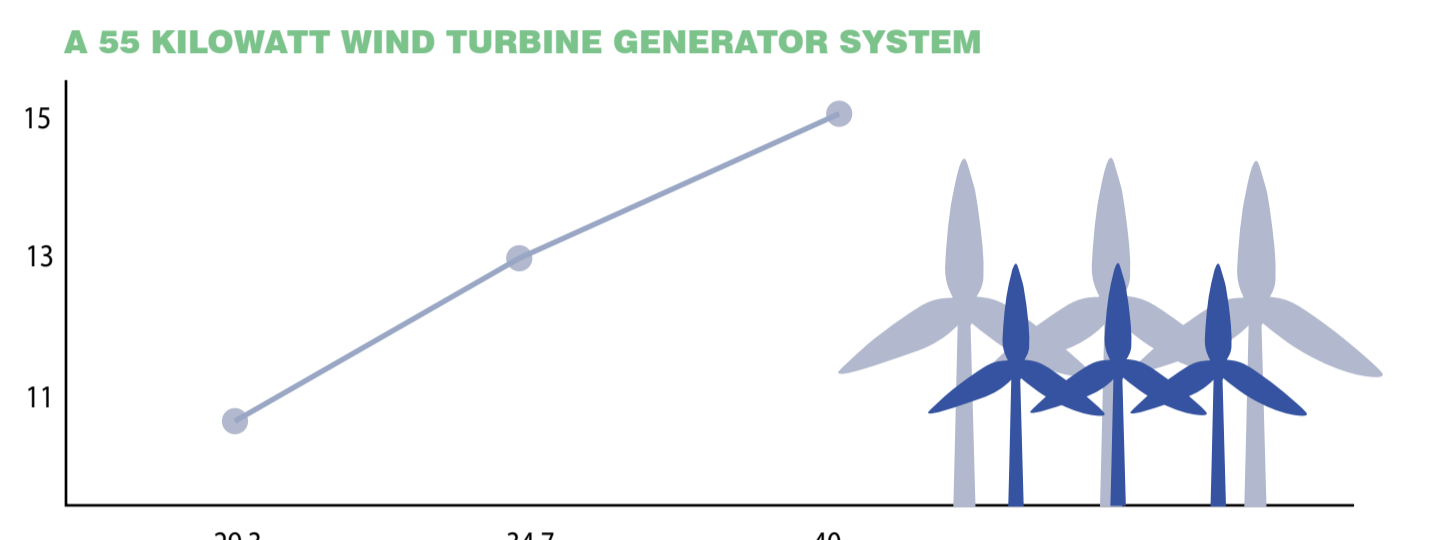
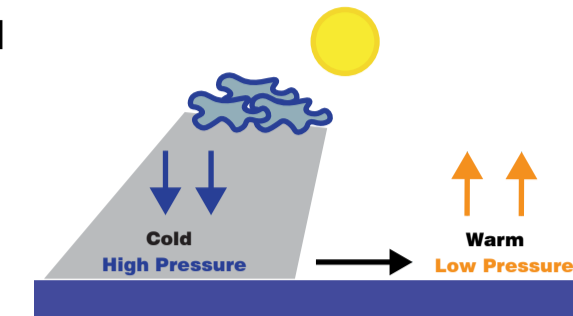
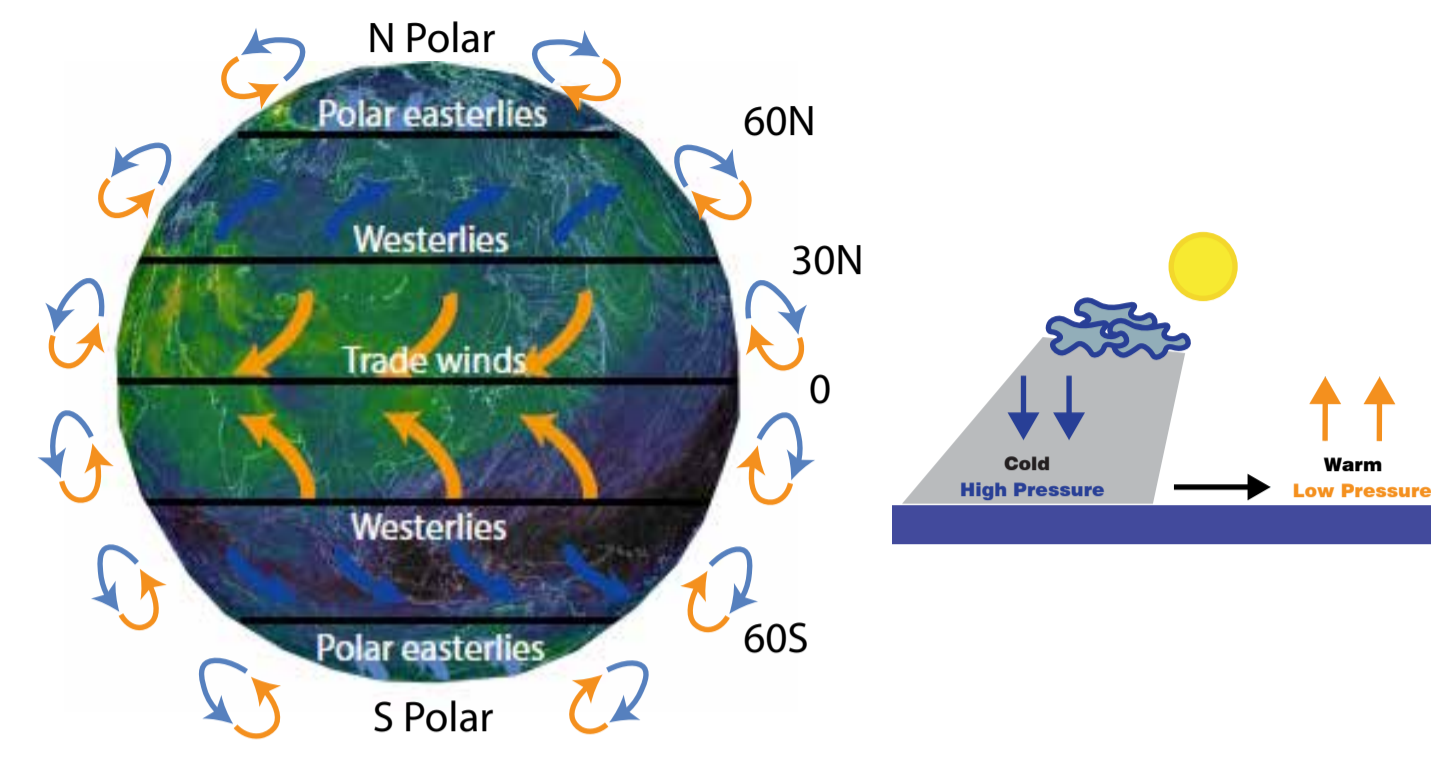


Energy Land

TRENDS OF WIND SPEED

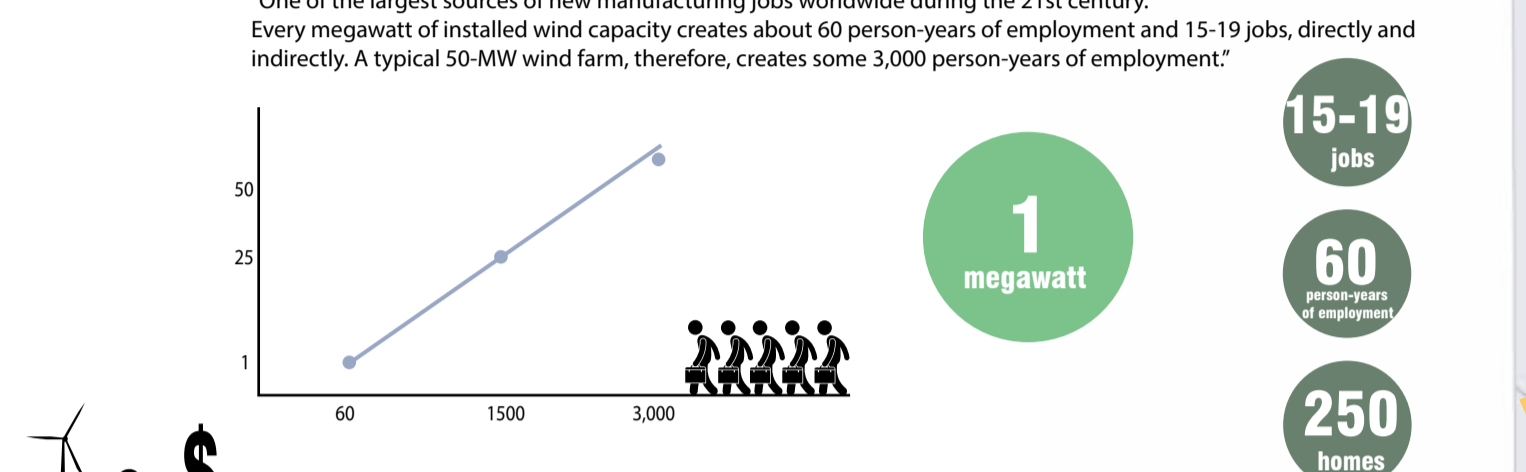


Increased wind speeds allow the city to access greater economic benefits when the wind speed is 15MPH, the output power of the system is 40 kilowatts, when the wind speed is 13MPH, the output power of the system is 34.7 kilowatts, when the wind speed is 11MPH, the output power of the system is 29.3 kilowatts.

BENEFITS OF WIND ENERGY

ENVIRONMENTAL BENEFITS
 Nowadays, considering the issues raised by climate change, people all over the world pay careful attention to global warming and make efforts to combat climate change with renewable energy usage, investment, and design. Wind power is one of the main renewable energy in Australia. "Wind power is a rapidly expanding mode of renewable energy production with an average annual rate of growth in installed capacity of 35% over the five years up to 2011."

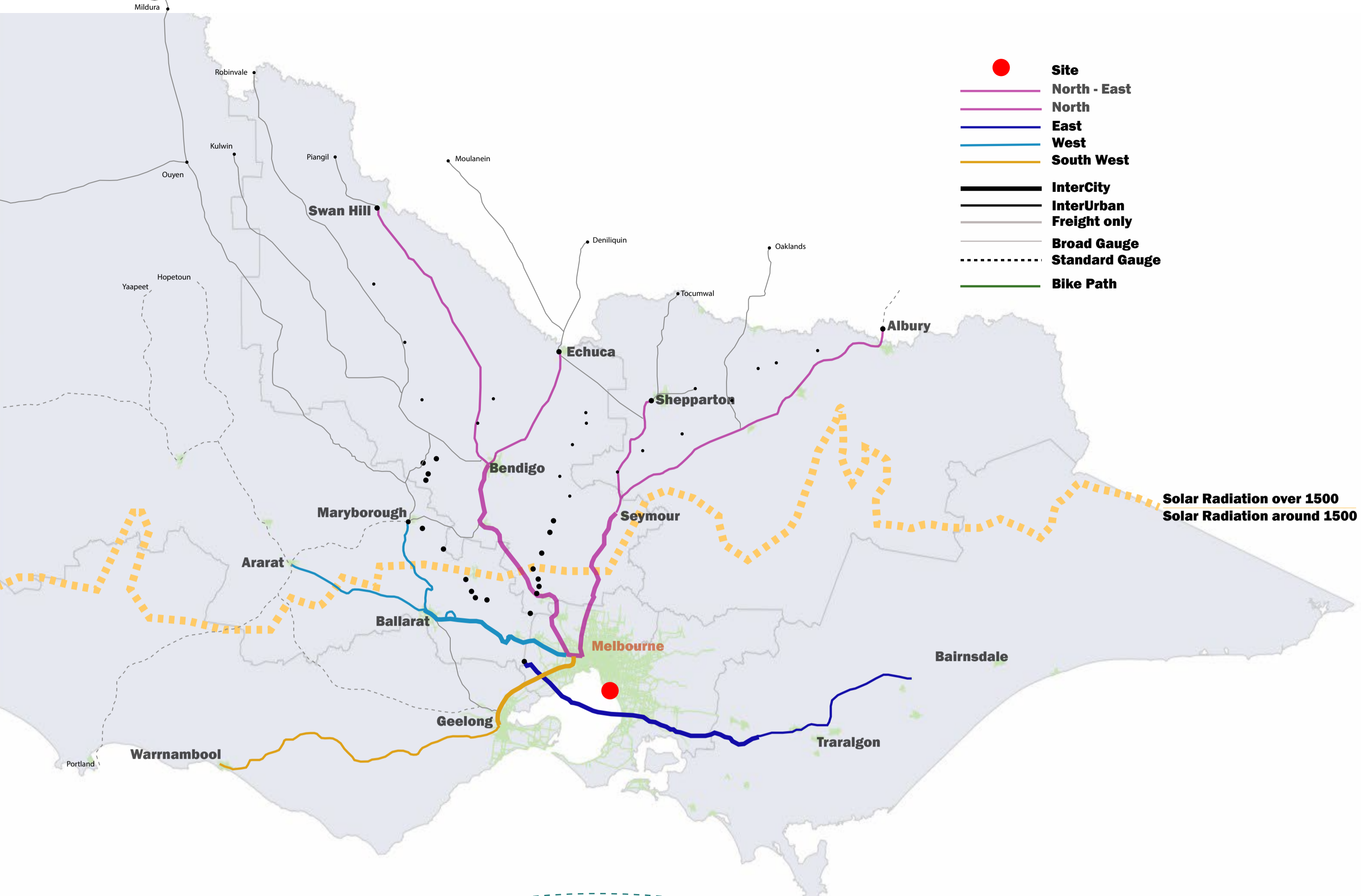
SOCIAL BENEFITS
 "One of the largest sources of new manufacturing jobs worldwide during the 21st century. Every megawatt of installed wind capacity creates about 60 person-years of employment and 15-19 jobs, directly and indirectly. A typical 50-MW wind farm, therefore, creates some 3,000 person-years of employment."



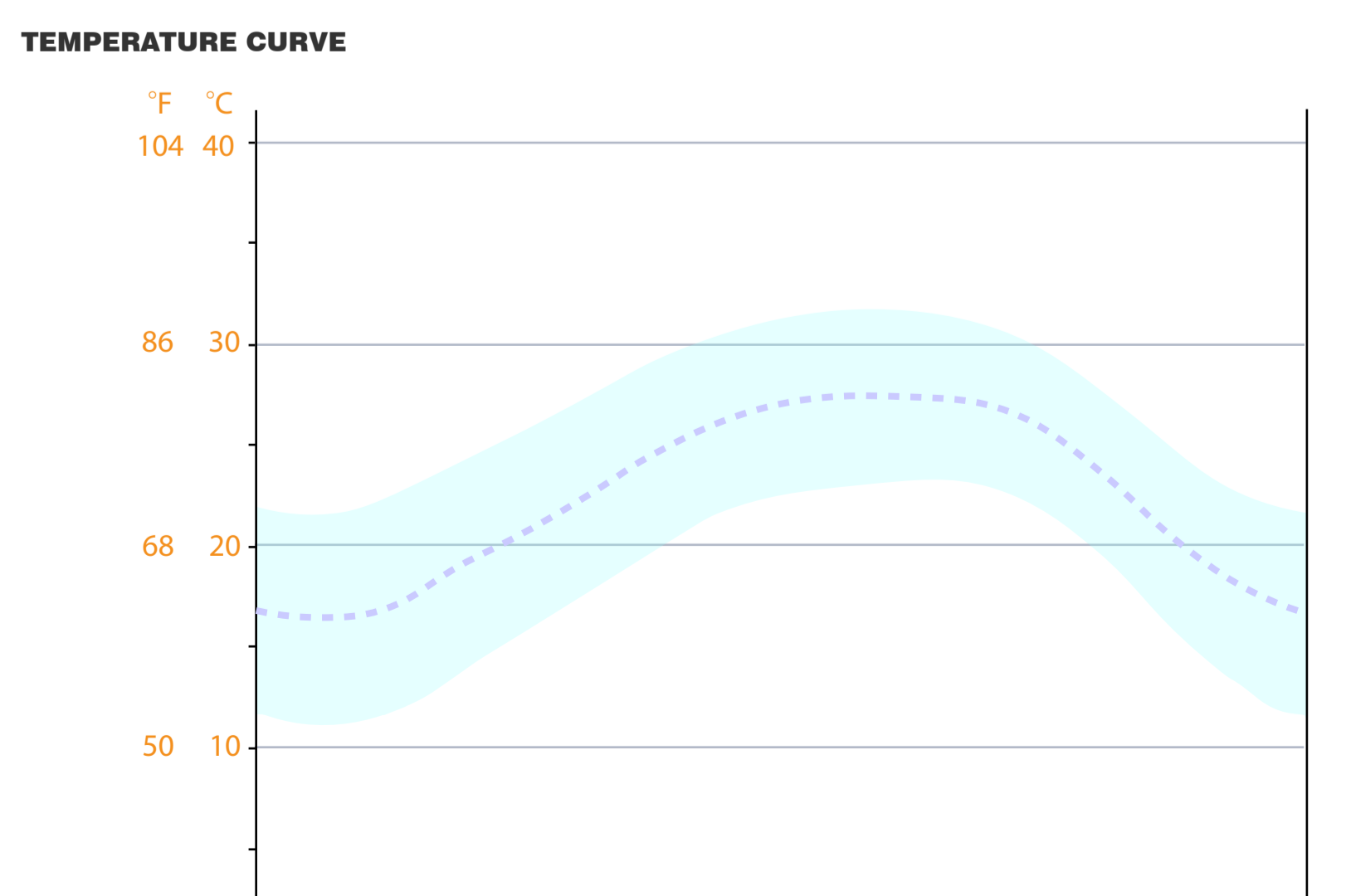
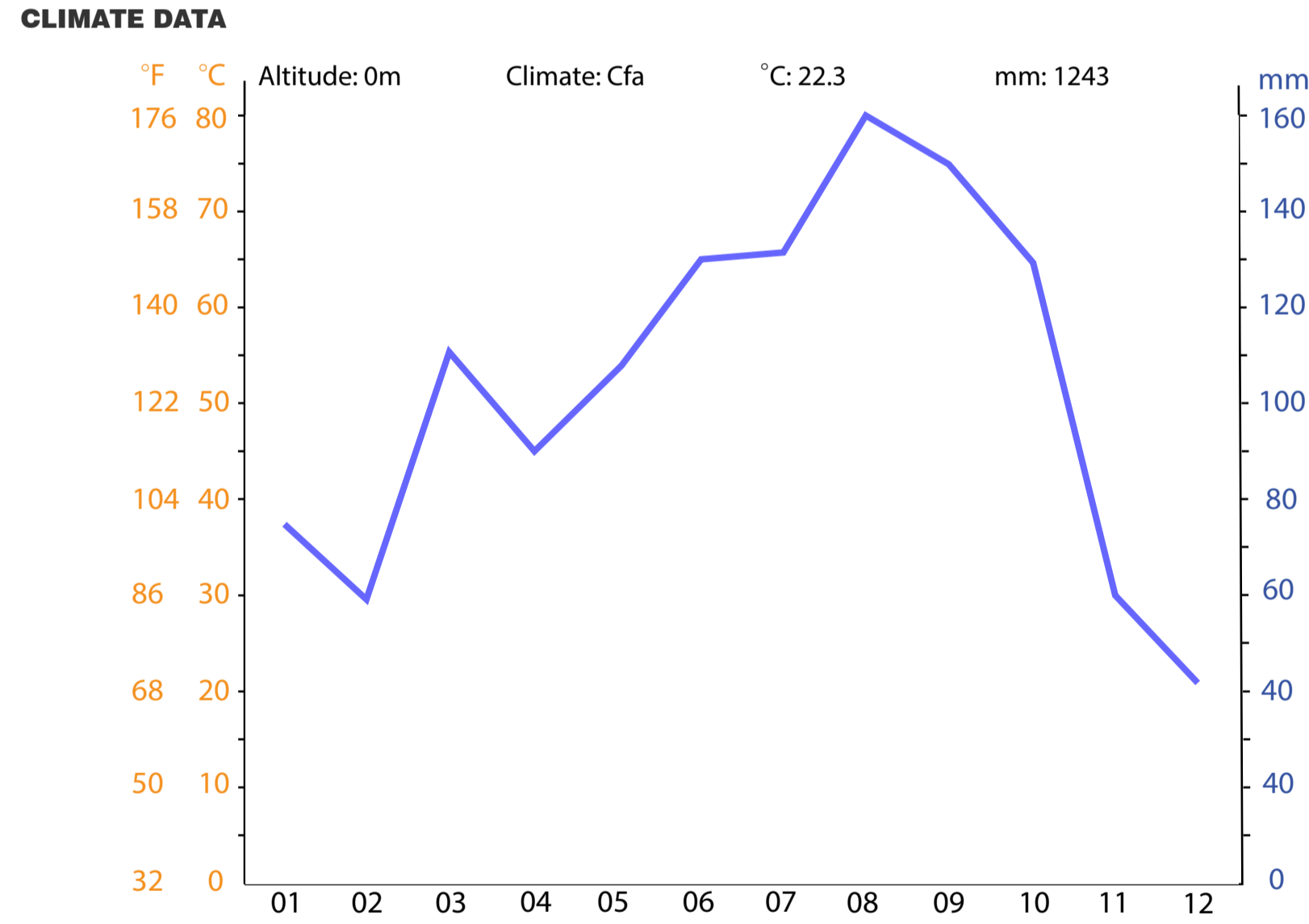
ECONOMIC BENEFITS
 "Although leasing arrangements can vary widely, a reasonable estimate for income to a landowner from a single utility-scale turbine is about \$2,000 a year. For a 250-acre farm, with income from wind at about \$55 an acre, the annual income from a wind lease would be \$14,000, with no more than 2-3 acres removed from production. Farmers can grow crops or raise cattle next to the towers. Wind farms may extend over a large geographical area, but their actual "footprint" covers only a very small portion of the land, making wind development an ideal way for farmers to earn additional income. In West Texas, for example, farmers are welcoming the opportunity to host wind farms with lease payments."

- 1 megawatt
- 15-19 jobs
- 60 person-years of employment
- 250 homes
- 250 acres a wind farm
- \$13,750
- \$14,000

<http://www.asiawind.org/research-data/market-overview/australia/>
<http://canwea.ca/wind-facts/social-benefits/>
<http://www.climatechange.org/wind.htm>
 Office of Energy Efficiency and Renewable Energy (2010-02-04). "Installed Wind Capacity by State". United States Department of Energy. Retrieved 2010-03-12.
<https://earth.nullschool.net/#current/wind/surface/level/steerographic>



SOLAR ANALYSIS



WIND MAP WIND SPEED

