

Before reading the text, answer these questions

- a) What do you think a gas-fired power station produce?
- b) What do you think is the role of a chief engineer?

Read the text and answer the following questions:

- a) What powers the generators in Jeff's station?
- b) What two things does Jeff like the most about his work?
- c) What's the plant's biggest environmental challenge?
- d) Would you like to do Jeff's job? Why/why not?

Hello; My name's Jeff.
I'm Chief Engineer in a gas-fired power station



I work in a gas-fired power station. We have two gas turbines and a steam turbine. It's known as a CCGT plant, Combine Cycle Gas Turbine; that way we get as much useful heat from burning the gas as possible.

The gas turbine operates at around 1400°C. The exhaust gases from the gas turbine are fed into the steam turbine; we don't want to waste any heat from the burning gas.

We generate up to 700 megawatts of electricity. That's enough to supply over 500 000 homes.

At university, I studied mechanical engineering. In my final year, I specialized in thermodynamics. I visited several power stations for my final project.

I joined the company ten years ago. They had just demolished an old coal-fired station here and I came in when the new plant was being built as a commissioning engineer for startup.

I really like the idea that I'm contributing to the local community, keeping everybody warm in winter and cool in summer; I also enjoy training and mentoring our three engineering apprentices.

In order to protect the environment, my company's main concern is cooling water; the river water in the cooling towers leaves at around 30°C into ponds to cool naturally before going back to the river.