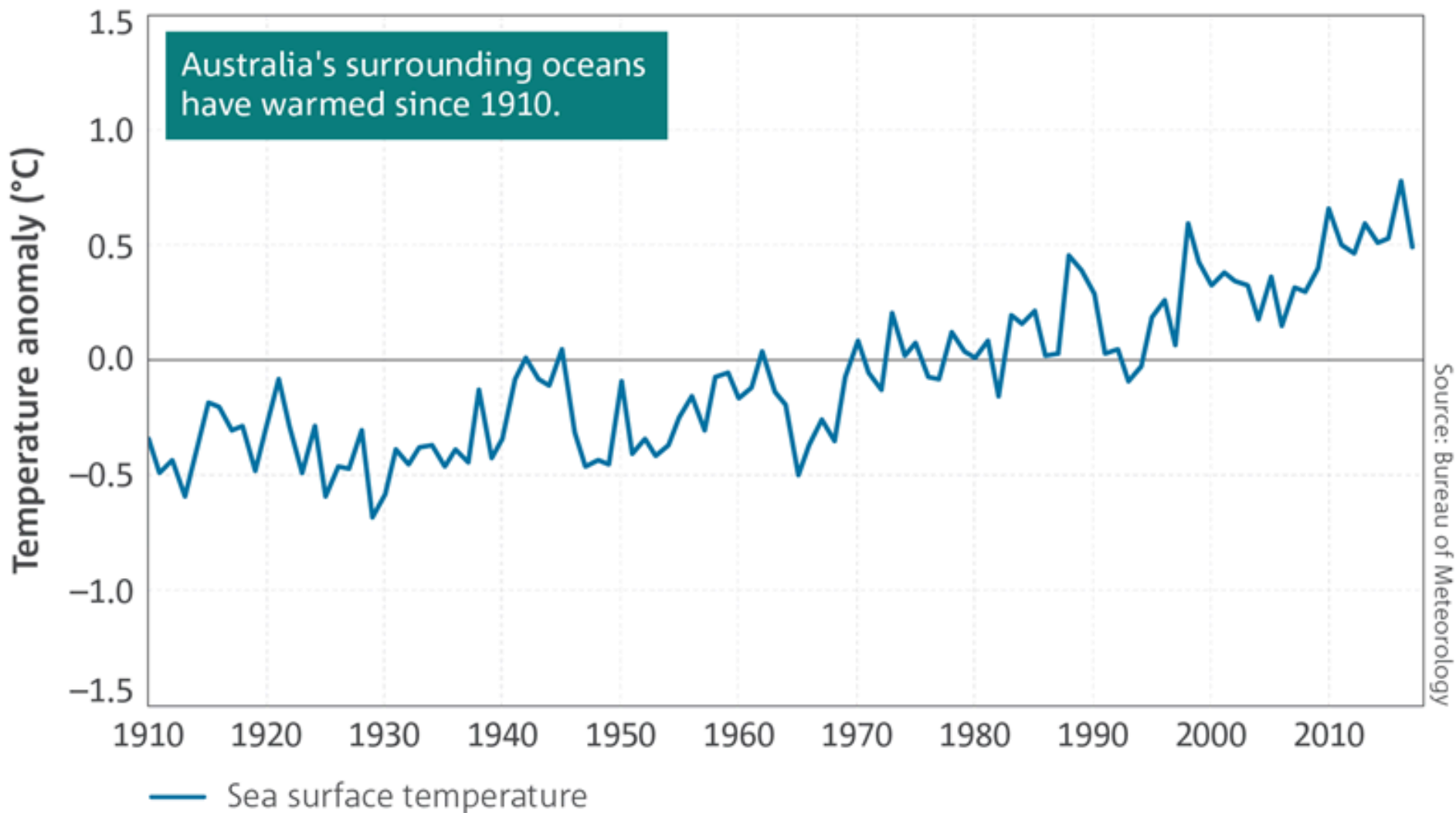


Australian Sea Surface Temperature Anomaly



Data Source: Bureau of Meteorology

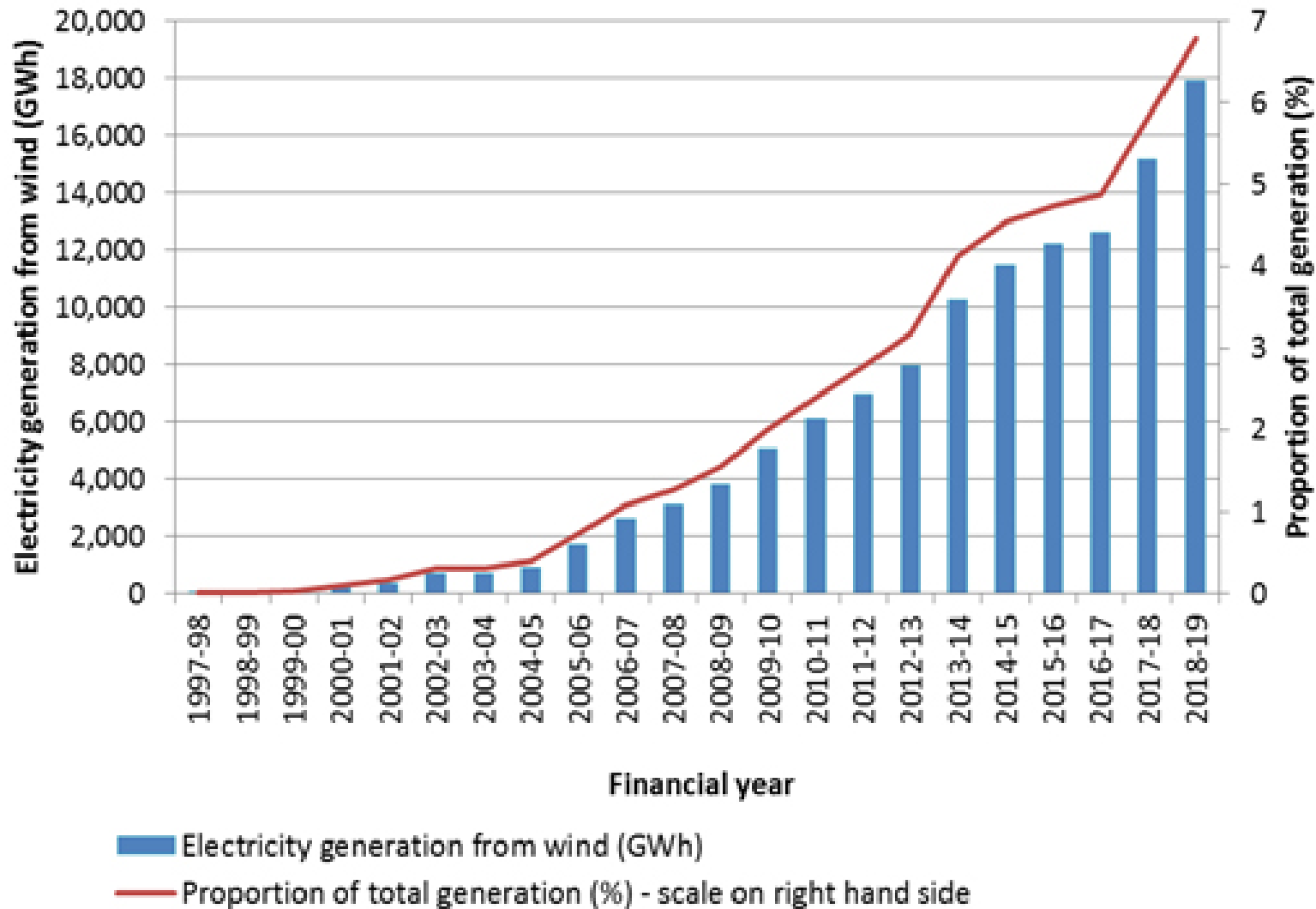
What is this graph telling me?

1. Sea-surface temperature (SST) – how warm the water closest to the surface is.
2. Temperature anomaly – the difference between the long-term average temperature (represented by the 0 line) and the temperature recorded in a specific year. A positive number means the SST was warmer than average. A negative number means the water was colder than average. The zero value is the average temperature from 1961-1990 (30 years).
3. From 1910-1970 (60 years), sea surface temperatures were mostly cooler than average.
4. From 1980 - 2020 (40 years), sea surface temperatures were mostly warmer than average.
5. Sea surface temperatures rose approximately 1.2C between 1910 and 2020.

How does this impact communities and the environment? *Source: CSIRO*

1. Marine ecosystems are negatively impacted
 - **Coral bleaching** - a hotter atmosphere doesn't just make water warmer, it also makes it more acidic (ocean acidification). This means algae that help keep corals alive can't cope and will eventually die off leaving corals unable to recover.
 - **Ocean acidification** - disrupts animal reproduction, growth, and where animals can live. This can lead to big changes in the food web.
 - **Animal migration** - migratory animals such as fish, whales, and dolphins change their behaviour as waters warm and food sources are impacted.
2. Human communities are negatively impacted
 - **Sea-level rise** - warmer water expands and leads to a rise in sea-level. This threatens coastal communities.
 - **Food sources** - animal migration and changes in food availability for ocean species decreases the productivity of our fisheries.

Australia's total electricity generation from wind (and as a proportion of total electricity generation)



Source: Parliamentary Library calculations using data from [Australian Energy Statistics](#), Department of Industry, Science, Energy and Resources, Table O1, May 2020.

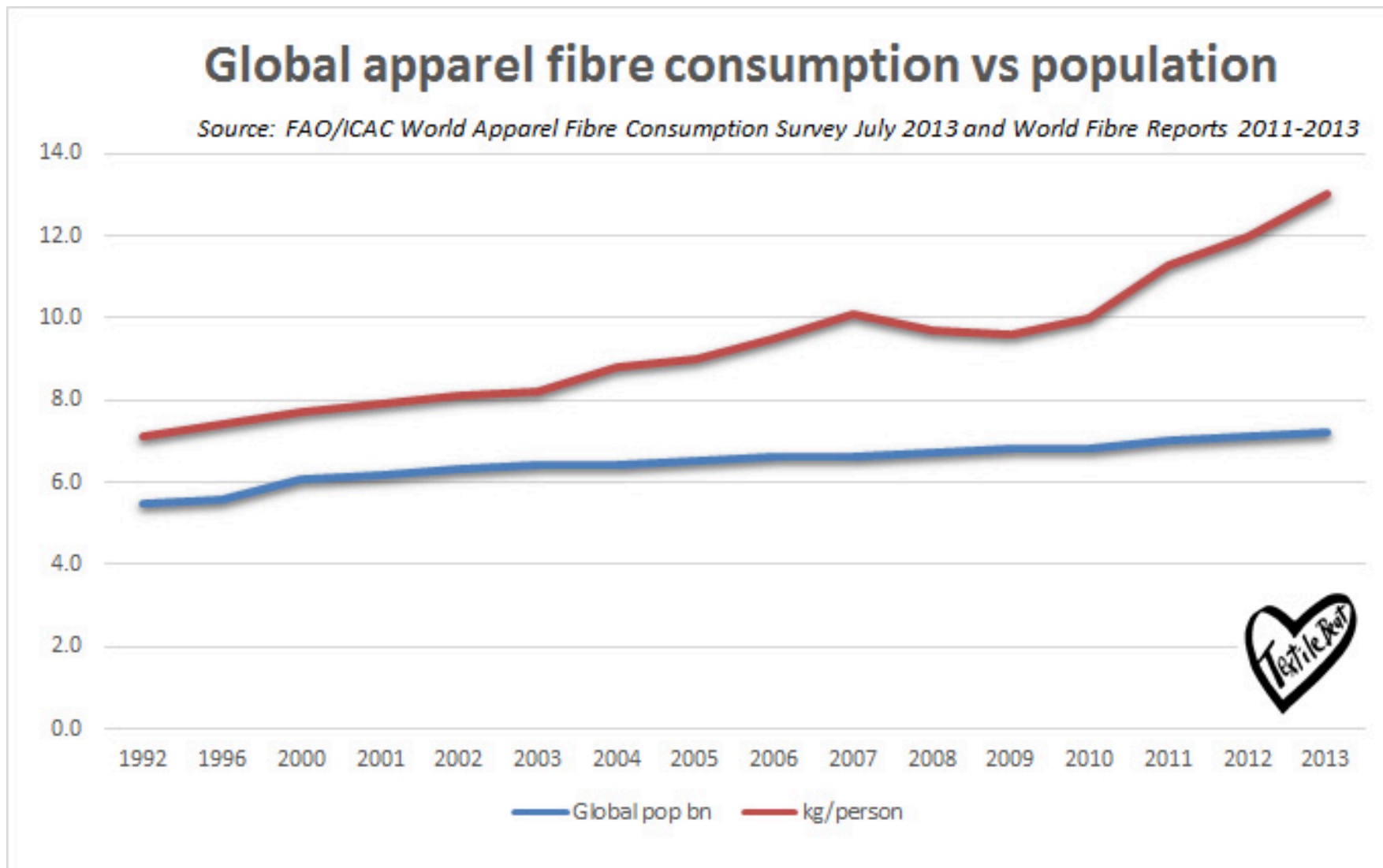
What is this graph telling me?

1. The blue bars represent the amount of power (GWh) that wind energy produces each year.
2. The red line represents the percentage of Australian energy that is generated from wind energy.
3. Before the 2000s, almost no energy was produced from wind farms.
4. Over the last 20 years, wind farms have rapidly developed and the amount of wind energy produced has drastically increased. Wind energy now makes up around 7% of Australia's energy.
5. Additional info - in 2022 renewable energy contributed 32% of Australia's energy production, and fossil fuels (coal, gas) contributed to 68%.. Source: [DCCEEW](#)

How does this impact communities and the environment? *Source: [The Australia Institute](#)*

1. Wind energy is a renewable energy source and helps limit greenhouse gas emissions.
2. Burning fossil fuels is the number one contributing factor to climate change. Switching to renewable energy sources like wind is our greatest chance of minimising climate change impacts.
3. Building wind turbines and the ongoing production of wind energy offers employment and economic benefits to the rural and regional communities that host them.
4. Wind turbines are linked to some bird and bat deaths, however, these are minimal and expected to decrease as wind technologies advance.

Global apparel (fashion) fibre consumption vs population



Source: FAO/ICAC World Apparel Consumption Survey, 2013 & World Fibre Reports 2011-2013

What is this graph telling me?

1. The blue line represents the global population (in billions of people). Our population has grown from 5.5 billion (1992) to 7.2 billion (2013).
2. The red line represents the kilograms of apparel fibre (used in clothing, shoes, accessories etc.) the average person purchases brand new each year. This has grown from around 7kg/person in 1992 to around 13kg/person in 2013.
3. The consumption of apparel has been dramatically increasing, especially since 2010. This is linked to the rise in fast fashion - inexpensive clothing mass-produced to keep up with fast-changing trends.
4. [Additional information](#): In 2018-19 fibre consumption reached 14.8kg of new clothing per person.

How does this impact communities and the environment? *Source: [Australian Fashion Council](#)*

1. Environmental impacts of apparel consumption
 - Clothing is increasingly made from synthetic fibres (like polyester and nylon) which do not break down when disposed of in landfill.
 - If fashion consumption continues at its current rate, it is predicted that by 2050 the industry will account for over 26% of greenhouse gas emissions.
2. Social impacts of apparel consumption
 - To keep up with the growing demand for high-volume cheap fashion, working conditions can often be below Australian working standards in terms of health, safety, and income.