

At Puffing Billy Railway we take steps to reduce our environmental footprint. We have safety trolleys and controlled burns to protect against sparks that cause bushfires, we have an environmental team that removes invasive flora species and plants native species and a brand new building that reduces our energy usage. As an operating heritage steam train we are always trying to reduce our CO2 emissions and environmental impact.

WHAT COULD WE DO AT PUFFING BILLY RAILWAY TO BECOME MORE SUSTAINABLE WITH OUR ENERGY USE? HOW COULD PUFFING BILLY RAILWAY BECOME MORE ENVIRONMENTALLY FRIENDLY?

Write down any ideas you have about sustainability at Puffing Billy.

eg. Solar panels

VOLUNTEERS OF THE RAILWAY

Puffing Billy Railway has over 200 dedicated volunteers. Volunteers put life into our living museum, supporting the smooth and safe running of the Railway in a range of unique and meaningful roles. Volunteers have been capturing the spirit of the steam age in all its charming glory since the year 1900. These days it is harder to find passionate people to champion, restore and maintain the railway.

Create an advertisement (newspaper advertisement, radio, film, drawing, poster, etc.) encouraging people to volunteer at Puffing Billy Railway. Applicants need to know:

- What are the benefits?
- What are the hours?
- What roles are there for volunteers?
- Why should they get involved?
- How will they apply

What did you see at Puffing Billy Railway that you could use to encourage applications? Remember it needs to capture attention!

Write and draw your ideas in the box below. **NOTE:** These ideas may help prepare you to create an advertisement for Puffing Billy Railway once your back at school.



TRACK WHAT YOU SEE

Design Thinking is used to find multiple solutions to a big challenge.

Design thinking includes these steps:

- Empathise – understand the problem
- Define – outline the problem and challenges
- Ideate - design ideas and choose one to try
- Prototype – start creating your design
- Test – test your design to see if it works
- Refine - improving your idea, creating another prototype and testing again

Start designing and developing your idea for an innovative train for the railway, a bridge for the railway or a working system (e.g., creating steam, new sound system or lights for a carriage). Write down any of your ideas (ideate), designs or notes while at Puffing Billy Railway. Use these to inform the design of a prototype back at school.