

FUTURE SPARK BIKES FAQ'S



Question 1. How many bikes are there? And is there an age limit to who can participate?

There are 12 bikes, 6 bikes on each side of the trailer (2 small, 2 medium and 2 large bikes on each side). There is no upper age limit (even the governor Prof. David De Kretser and Mrs De Kretser have ridden the bikes!) The only condition to riding is reaching the pedals. To help with pre-school aged children we have an extra small child's bike on a stand in addition to the 12 bikes (it is not connected to the grid however it doesn't seem to worry the little kids as they can have a ride and don't have to worry about balancing). Babies and toddlers often sit up with their parents on the larger bikes. The grade 1 and 2 children can ride the smallest of the 12 bikes on the trailer.

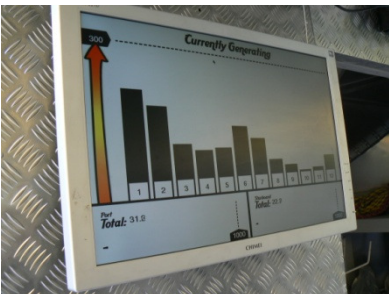


Question 2. Will there be someone on the day running the Future Spark bikes?

Yes, there will be an instructor in attendance at all times to facilitate activities and learning on the day. This instructor will also ensure the bikes all remain in working order and that the power transmission remains operational and safe throughout the day.

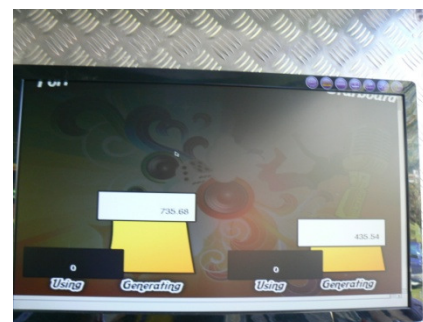
Question 3. Is there a monitor of some sort that indicates the amount of power generated?

Yes there are 2 monitors - The monitor on the left front of the trailer displays a graph of 12 bars, to individually match each of the 12 bikes. Each bar depicts the power output for each bike in watts. At the bottom of this monitor, a total generated energy score (in Watt.hrs) is shown for each half of the trailer (6 bikes on the left and 6 bikes on the right).



The monitor on the right front has 2 graphs - one for each side of the trailer, showing in real time:

1. the power being **used** (when an appliance is in use - such as a microwave to cook some popcorn, a kettle or hairdryer)
2. the power being **generated** (by the 6 bikes on each side).
When the graphics show the power being used by that appliance.



Question 4. Is the power used in any way?

The power generated goes into the mains electricity grid via an inverter (which transforms the voltage to 240 volts to be compatible with mains electricity). The electricity generated can be used to offset the power used for a particular event.

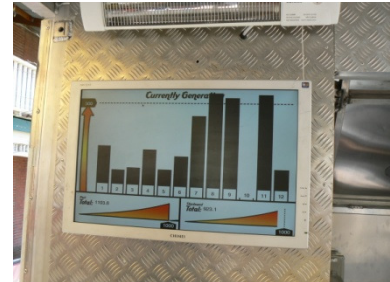
Some examples of how the power has been used/offset:

- Earth hour 09 in Federation Square, where the bike trailer was in Fed Square for the full week leading up to earth hour. Over 130 teams (1200) riders participated in school/community/corporate challenges to generate the power for the Earth Hour Rock Concert. 60,000 KWatt Hours were generated – more than enough for the 3 hour rock concert!
- Knox Council: Future Spark visited 10 schools with the main aim to offset the electricity use for the Stringybark Sustainability Festival and to immerse students practically in education on energy. 15,000 Watt Hours was generated.
- Popular Festival activity - people of all ages join in cycle to generate enough power to cook a bag of popcorn (35 Watt Hrs) and eat it at the end! - This is a great activity as when you turn on the microwave to cook the popcorn , a graph of the power being used in real time comes up on the right screen and the total energy score (watt hrs) on the left screen starts to go down - showing how many watt hrs are being used up! This is very educational for young and old.
- The Neighbours TV show used the trailer in two episodes where the Erinsborough High students generated sufficient power to off-set their Debutante Ball. Clearly, although this was "just TV" never-the-less the parameters around the event were realistic and representative.
- Melbourne Girls College generated enough power (with a little help from the Governor Prof. De Kretser and Mrs De Kretser) to off-set an evening concert and Rod Quantock's show "Bugger the Polar Bears".
- Hepburn Wind Cooperative generated power in the town Square in Daylesford to off-set a showing of the movie "The Age of Stupid". The aim was to generate 2,000 Watt hrs by the end of the day. All throughout the day, many of the children and young teenagers revisited the bikes to check on the score and ride a bit more to help towards reaching the target. At the end of the day, members of the local football and netball clubs came for a 30



minute challenge and the target was

achieved.



See our web site for more photos

www.futurespark.com.au and google you tube "future spark bike power" for video footage.

Question 5. When How much space is required?

10m X 10 m approximately. This allows a bit of space to walk around the trailer when it is unpacked (approx 7 mtrs width and 8 mtres long)



Question 6. What is the cost?

School rate \$990

Festival Rate \$1400

Extra costs may include travel/petrol/accommodation costs.

Question 7. Are there any power requirements?

Yes, we need to have our cable plugged directly into a regular 10 amp power point (we prefer not to plug into domestic style power boards as the connection can be less secure and the inverter is very sensitive to power glitches. If the inverter shuts down it takes several minutes to start-up again which is quite disruptive.)

The trailer needs to be positioned within about 20 mtrs of a power point. We do have an additional extension lead that can be used to extend the distance to 40 metres, but the less distance the better.

Question 8. Is it safe to have the electricity generated from the bikes going into the power point?

Yes all the cabling is tagged and the inverter that transfers the voltage to 240 volts is a certified Australian Standard inverter.

Question 9. Is the program affected by weather?

No, unless the weather is extreme. We have awnings that protect riders from the sun and moderate showers. Depending on the angle the sun may shine in on the end bikes, so riders may need a sun hat. In the event of heavy rain, or electric storms the activity may be temporarily stopped until conditions improve.

10. How long does it take to set up/pack up?

Between 1 – 1/12 hours. We aim to arrive 2 hours before start up time. If the festival has security it may be possible to bump-in the day prior. For outside festivals longer than a day, the trailer needs to be packed up overnight.

11. What is a Watt – a - thon?!!

A fundraising activity for schools/groups to cover the cost of the hire of the FS Bikes, and extra money raised can go towards a school/community/education project.

For example -

- Have 8 X five minute power challenges over a lunch time, with groups of 12 riders for each set of 6 bikes (riders swap over to keep the energy pumping!)
- Record each group's total score (measured in Watt Hours) on a score sheet.
- Riders then collect money from sponsors who have pledged their support! (ie if one group scored 100 Watt hrs, and each of the 12 riders just had one sponsor pledging 10 cents per Watt Hr, that would raise \$10 per rider (or \$120 per group per 6 bikes over a 5 minute period!)

12. Do you have accreditation with any organisations?

We have accreditation with Resource Smart AuSSI Vic Schools (being facilitated by CERES Environmental Park on behalf of Sustainability Victoria and the Department of Education and Early Childhood Development.) AuSSI Vic is a framework to help schools plan and implement sustainability practices for their school. It encourages student leadership skills, provides curriculum support and achieves measureable green solutions for school communities. As AuSSI Vic facilitators, Future Spark has participated in comprehensive training, resulting in an understanding of the principles of the framework. Whether a school has committed to the AuSSI framework or perhaps educating their community in their own individualised programs, Future Spark can support the school community in the ongoing journey of Education for Sustainability.

Please contact Robyn Ball if you need any more information or would like to book our trailer. (Typically we are finding October - December, then Feb - May are busy periods so to avoid disappointment please book as early as you can)

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