



Dear students, teachers and schools,

We are happy to welcome you to the **2016 POWER Renewable Energy Challenge**. Power is a design challenge for the Greater Tygerberg high school community.

POWER is a design challenge for students to create renewable energy solutions. The challenge runs from March to June 2016 and includes 2 rounds. The first round is a poster design challenge *Show us your renewable energy technology!* and the second round is a product design challenge: *Pimp your solar charging kit!*

We believe that young people must play a part in providing safe, affordable energy alternatives to our communities. POWER is your chance to learn about career possibilities in the sustainability sector and to use your imagination to power up your community and our country.

The challenge forms part of a strategy to raise awareness about renewable energy careers for high school learners in the Greater Tygerberg area. The basic concept for the two stage challenge is for high school learners to create posters about renewable energy and design consumer products using solar PV modules. The groups with winning posters will move through to the product design stage which includes a full day of talks and workshops, the WIND & SUN MAKER event. Finalists of the product design attend the PITCH JOURNEY, another full day with finalists, judges and more. A final prize-giving and exhibition of all poster and product designs will take place 16 June 2016. All POWER participants and the Greater Tygerberg community are cordially invited.

POWER is designed to teach problem solving and design thinking to unleash youngsters' creativity and help them create real solutions. We'll inspire students to do more research and offer a platform to voice their own ideas. Students from various schools get hands-on technology experiences, get to work with professionals and are trained to identify local opportunities for renewable energy. We empower students, teachers, schools and industry stakeholders to design better renewable energy alternatives, from and for our communities.

POWER is a program run by InnovateSA, in partnership with the Greater Tygerberg Partnership and with support of SARETEC. Learn more at: www.innovatesa.org/power, www.gtp.org.za and www.saretec.co.za.





Timeline of events and competition stages

ROUND 1: POSTER DESIGN Show us your favourite renewable energy technology!

ROUND 2: PRODUCT DESIGN Pimp your solar charging kit!

1 KICK-OFF

Date: March

The InnovateSA team will kick-off the campaign with a presentation to you. We'll give an introduction to renewable energies, share information around the challenge, and we'll have some fun surprises.

2 POSTER DESIGN DUE

Date: 11 April

Submit your poster and completed application form to your teacher. Make sure to have checked all guidelines and criteria and to have completed all forms. We won't accept incomplete or late poster submissions. Of the 10 participating schools a total of 16 teams will be selected to go into the product design round (32 students).

NOTE: Poster winners will be announced on 15 April.

3 WIND & SUN MAKER EVENT

Date: 23 April

All poster design winners attend the **WIND & SUN MAKER EVENT**. This Saturday will give you a tour & talk, a design-thinking workshop and a maker session. Expect a day filled with inspiration, experiencing, learning, making, playing and connecting with likeminded winners.

NOTE: You will assemble the product which is also your Round 2 challenge: Pimp it!

4 PRODUCT DESIGN DUE

Date: 6 May

Submit your pimped product and completed application form to your teacher. Same guidelines as above apply, but this time we'll have different judging criteria. **NOTE: 6 Finalist teams (12 students) will be selected to go on the PITCH JOURNEY.**

5 PITCH JOURNEY

Date: 13 May

The 6 finalist teams will spend a day with the InnovateSA team and the judging committee. All teams will pitch their product design - and we'll also have some fun.

6 PRIZE-GIVING & EXHIBITION

Date: 16 June

All posters and product designs will be exhibited at the public prize-giving in Tygerberg. See you all there!

Get excited, get involved!

WEBSITE www.innovatesa.org/power

FACEBOOK POWERrenewableenergychallenge

HASHTAG #POWERtygerberg

