

“Geothermal energy has several significant advantages over other forms of renewable energy.”

What does geography mean to me? I am a geologist, entrepreneur and climate change activist. I have a 2:1 degree in BSc (Honours) Geology from the University of St Andrews, and I've started a geothermal energy consultancy company in Scotland – Town Rock Energy Ltd. The scientific evidence of anthropogenic climate change is what inspires me to do what I do.

I founded Town Rock Energy shortly after I graduated University. I was advised that I would need a Masters degree in order to have any competitive advantage when applying for graduate schemes, but because I was tired of being educated formally and wanted to get out in 'the real world', I decided this was not the path for me and wasn't sure what to do. Then I received a circulated email in my inbox that challenged any 2013 graduate with a business

idea to enter a start-up competition with prizes of up to £50,000. Two months later, I won the renewable energy category of SIE's

Young Innovators Challenge, which granted me 18 months of business advice and funding. I was initially bewildered by the task in front of me, but I am incredibly

fortunate to have an exceedingly cool-headed and helpful father, who is also a geologist, has 35 years' experience in the oil and gas industry, had just recently retired, and is still very enthusiastic to advise me throughout my venture.

Geothermal energy has several significant advantages over other forms of renewable energy. It has a lower local environmental impact as there is almost no visible surface infrastructure; it provides reliable controllable 24-hour energy; and it is closer to existing infrastructure and areas of high energy demand. Town Rock Energy applies well-established hydrocarbon exploration techniques, integrated with thermal modelling and risk analysis, to evaluate areas where hot water can be sustainably produced from the rocks beneath our feet. The mission of Town Rock Energy is to locate and assess all significant sources of geothermal energy in Scotland. Our vision is to see the geothermal resources that Scotland is blessed with used as an integral part of the renewable energy system that will drive Scotland forward as a global demonstrator of carbon-neutrality. Great teachers, awesome parents, and a fantastic education have inspired me to dedicate my life to combatting climate change through drastic and immediate reduction of global carbon dioxide emissions. This personal drive was quite a dilemma while still a student, as the vast majority of

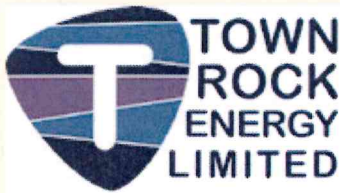
geologists go into very fruitful careers in either the oil and gas or mining industries, both of which have a history of causing detrimental harm to the local and global environment. I am incredibly lucky to be able to enter the exciting and rapidly-emerging geothermal energy industry in such a profound way.

Anthropogenic climate change is the biggest challenge the human species has ever faced, and probably ever will. The fact that the global consensus from the scientific community still faces naïve objections from a scary number of powerful individuals, both worries me and inspires me to try to change the world as quickly and effectively as possible. We all need to act to reduce global CO² emissions in any and all ways possible, because if we don't, my future children and all other humans born after 2020 will spend their lifetime watching the planet we have called home for so many centuries become gradually but consistently uninhabitable. I realise it is hard to think about the 'distant' future with any sense of urgency, but just think of the legacy that you are personally leaving behind you, and how your actions now will be judged by future generations.

Thank you for reading, and if you would like more information about what Town Rock Energy are doing, or want to get in touch, please visit www.townrockenergy.com.



DAVID TOWNSEND
Town Rock Energy Limited



Town Rock Energy exhibited on the Scotland Pavilion at the 2014 World Future Energy Summit in Abu Dhabi.



Town Rock Energy is establishing the UK's first geothermal lab in co-operation with the University of St Andrews. From left to right: Dr Tim Raub, Dr Richard Bates, David Townsend.