

# SAFETY AND SUSTAINABILITY

## Health and safety

Infigen’s first priority is the safety of our people and the communities in which we operate. Our goal is zero lost time incidents and injuries. We remain firmly committed to pursuing zero harm and reducing our 12 month lost time injury frequency rate. We continue to introduce new initiatives and enhance existing programs to assist with achieving this goal.

### Employee health and safety

YEAR ENDED	30 JUNE 2013	30 JUNE 2012
Group TRIR <sup>26</sup>	11.0	15.1
Group LTIFR <sup>27</sup>	1.2	1.2

Our aim is to build strong relationships through transparent communication with communities during all aspects of development, construction and operations, whilst respecting the diverse cultures, views and needs of these communities.

Prior to construction, all proposed wind and solar farms complete a development application process in consultation with specialist engineers, planning authorities and the local community. The areas of engagement vary State by State, but broadly cover:

- noise studies
- flora and fauna
- landscape and visual impact
- cultural heritage
- traffic and transport
- shadow flicker
- electromagnetic interference

As wind and solar farms become operational, Infigen aims to keep an open dialogue with its communities. Infigen has established a complaints handling policy that details fair and accessible processes for dealing with any concerns raised by the community about Infigen’s operating assets.

### Commitment to community engagement and support

Infigen is committed to making positive contributions in each of the communities in which we operate, are part of and live in. Infigen aims to foster lasting relationships with the community and local non-profit organisations by maintaining and enhancing community engagement and providing direct funding for local initiatives.

During the year Infigen in Australia held community consultation committee meetings in connection with its proposed Bodangora and Flyers Creek wind farms, and information sessions with various stakeholder groups in connection with its proposed Aragonne, Georgia, Kumeyaay and Pumpjack solar farms in the US, and Cherry Tree wind farm in Australia. Infigen uses these opportunities to establish respectful relationships, share accurate information and address misinformation about the projects and wind energy.

Infigen maintains a community engagement register to monitor and track direct financial contribution that Infigen provides to local communities, over and above the significant economic benefit derived from sourcing local products and services in the day to day operations of our assets. Direct financial contributions to community activities and sponsorships totalled \$333,000 in the 2013 financial year.

### Supporting community partnerships

Infigen supported the establishment of the Central NSW Renewable Energy Co-operative Ltd (CENREC), a community co-operative in Australia, in October 2012. During the 2013 financial year, the New South Wales Environment Minister, Robyn Parker, announced that CENREC was one of nine community groups to receive a grant (\$60,000) to identify opportunities for community renewable energy projects in Central NSW and remove barriers for these projects.

<sup>26</sup> Total recordable incident rate  
<sup>27</sup> Lost time injury frequency rate

## COMMUNITY SUPPORT IN 2013 FINANCIAL YEAR

- Educational, arts, sports and youth organisations
- Social welfare, diversity and charities
- Local community organisations and businesses

# \$333,000



Figures in A\$

OUR AIM IS TO BUILD STRONG RELATIONSHIPS THROUGH TRANSPARENT COMMUNICATION WITH COMMUNITIES DURING ALL ASPECTS OF DEVELOPMENT, CONSTRUCTION AND OPERATIONS, WHILST RESPECTING THE DIVERSE CULTURES, VIEWS AND NEEDS OF THESE COMMUNITIES.



During the 2013 financial year in Australia two landmark reports examined the levels of infrasound generated by wind farms. Both reports concluding that wind power technology did not generate abnormal or unusually high levels of infrasound when compared with background levels that humans are typically exposed to in everyday life. The South Australian Environment Protection Authority's report concluded that:

**“The level of infrasound at houses near the wind turbines is no greater than that experienced in other urban and rural environments”, and that “the contribution of wind turbines to the measured infrasound levels is insignificant in comparison with the background level of infrasound in the environment”. The Victorian Department of Health released a fact-sheet stating that: “There is no evidence that sound which is at inaudible levels can have a physiological effect on the human body. This is the case for sound at any frequency, including infrasound.”**



WE KNOW THE AREA VERY WELL, AND CAN SAY THAT THE WIND FARM RESULTED IN GREAT ACCESS TO A LOT OF AREAS THROUGH THE PROPERTIES. THE ROADS WITHIN THE WIND FARM ACT AS EFFECTIVE FIRE BREAKS AS WELL AS PROVIDING GOOD LOCATIONS FOR POTENTIAL FIRE FIGHTING.

**David Elward**

Taylor's Creek Rural Fire Service, Captain,  
Capital and Woodlawn wind farms, NSW, Australia



**NAOMI STRINGER**

**UNSW CO-OP STUDENT**

The development and construction of the Capital East solar farm is providing valuable practical experience to our next generation of renewable energy professionals. This includes Naomi Stringer, who is part of a UNSW Co-op student internship program.

"I started work with Infigen last November and will be with them for the rest of 2013, before going back to university in 2014. It's a great opportunity and has been a truly incredible experience so far. Having the opportunity to construct a solar farm is extremely exciting and far beyond what you can learn from a textbook. My supervisors have been fantastic – despite the endless questions they have had to put up with – and I can't wait to see Infigen expand its solar capacity in the future."

UNSW Co-op student Naomi Stringer, working on Capital East solar farm, Infigen's first solar farm.

**Sponsoring causes that matter to the locals**

Infigen supports various community groups that focus their efforts on helping in the areas of social welfare. Organisations including the Mission of Umatilla County, Young Life, Kids On Land, Sweetwater Goodfellows, University of Illinois, Youth 4H and many others each play an important role in making life better, healthier and safer for individuals and their communities.

**Cheering for the future generations**

Youth sports clubs are at the heart of communities and play an important role in shaping healthy lifestyles. During the year Infigen supported many local sporting teams and assisted some of them to participate in regional championships. In November 2012 Infigen championed and sponsored the Run with the Wind fun run at its Woodlawn wind farm. This was the first fun run in Australia to take place at a wind farm. The fun run attracted over 500 participants including an Australian Olympian.

**Employee led sustainability**

Infigen supports employees with fundraising activities for events that raise awareness of charities that are close to their hearts. Infigen participated in the MS 150 bike ride and fundraiser for the Multiple Sclerosis Society. Infigen employees raised over US\$4,200 and the company matched this amount.

**Supporting the next generation of renewable energy professionals**

Infigen supports the Co-op Program hosted by the University of New South Wales (UNSW) in Australia. The Co-op is a scholarship program developed by industry and the university as a strategic initiative to attract, train and develop outstanding young professionals. Participation in this program provides engineering students with practice and hands-on experience throughout their studies. In 2012, we sponsored three students from the 1st, 2nd and 3rd year of that degree.

**Sourcing locally**

Infigen seeks to source materials and services from locally based suppliers to support the local economy around its activities, enhance community engagement, and to reduce its impact on the environment from transportation. At Infigen's Capital East solar demonstration project, activities such as fencing, earth and road works services and construction materials were all procured from local suppliers.

**Raising awareness about renewable energy**

Infigen promotes renewable energy using factual and scientific data, and advocates for regulation that delivers increased policy predictability for the renewable energy industry. As a member of the American Wind Energy Association (AWEA) and Australia's Clean Energy Council (CEC), Infigen participates in their respective annual events – AWEA Windpower Conference and Exhibition and CEC Clean Energy Week.

Infigen continues to host open days and visits by parliamentarians, regulators, customers, suppliers and service providers at its wind farms to raise awareness and understanding of renewable energy. In Australia, to celebrate New South Wales' first Renewable Energy Day, Infigen hosted an open day at its Woodlawn wind farm. More than 350 people attended the open day, and had the opportunity to tour the wind farm and talk to the project developer and host landowners.

### Capital East solar farm – demonstrating solar PV capability

In July 2012 Infigen was granted planning approval from Palerang Council for the development of the Capital East project - a solar photovoltaic (PV) and energy storage facility of up to 1 MW capacity. Construction commenced in April 2013, with the first stage designed and built to trial innovative technologies and construction techniques.

## Biodiversity and Climate Change

### Responsibility for preserving bird and bat habitat

All of Infigen's activities take into account assessment of impacts on co-existing flora and fauna. During the year, Infigen supported the conservation and restoration of natural ecosystems, focussing on birds and their habitats through the Audubon Society in the US.

### Reducing risk of fire

As part of operations environmental management plans, Infigen is obligated to implement bushfire mitigation strategies at its wind farms, including regular fire prevention inspections. Infigen teams working on wind farms liaise with emergency services and ensure effective access for fire-fighters at all times.

### Greenhouse gas emissions

Infigen's Australian business unit reports its greenhouse gas emissions under the National Greenhouse and Energy Reporting (NGER) framework, in accordance with Australian legislation. The emissions from all of Infigen's US wind farms were also calculated using the NGER framework for the first time this year.

Scope 1 emissions are defined as the release of greenhouse gases into the atmosphere as a direct result of an activity from a facility such as a wind

farm (for example, from diesel fuel use in vehicles on site). Scope 1 emissions of Infigen's Australian and US wind farms reduced 4% to 825 tons of CO<sub>2</sub>e, approximately 200g of CO<sub>2</sub>e gases per megawatt hour generated in 2013 financial year.

Scope 2 emissions are those released into the atmosphere as a result of activities at Infigen's wind farms and offices that consume electricity, heat or steam generated offsite. An example is emissions from the electricity required to power the site during periods of no wind and electricity used in offices. Scope 2 emissions for Infigen's Australian and US businesses rose 5% to 12,919 tons of CO<sub>2</sub>e, offset by experiencing less periods of low wind or high wind conditions in 2013 financial year.

Both, scope 1 and scope 2, include the emission of carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), and nitrous oxide (N<sub>2</sub>O).

GREENHOUSE GAS EMISSION IN TONNES OF CO <sub>2</sub>	FY13	FY12	CHANGE %
Scope 1 – Australia	319	346	8
Scope 1 – US	506	513	1
<b>Scope 1 – Group</b>	<b>825</b>	<b>859</b>	<b>4</b>
Scope 2 – Australia	2,617	2,845	8
Scope 2 – US	10,302	9,430	(9)
<b>Scope 2 – Group</b>	<b>12,919</b>	<b>12,276</b>	<b>(5)</b>
<b>Scope 1 &amp; 2 Group</b>	<b>13,744</b>	<b>13,135</b>	<b>(4)</b>



## MAX & JOAN LIMON

### LANDOWNERS

In Australia, farmers Joan and Max Limon moved to Taylors Creek, Tarago, New South Wales, 33 years ago.

"When we were offered the opportunity to sign up for wind turbines at Capital wind farm, we did a lot of research ourselves first."

Joan Limon is a founding member of the Taylors Creek Landcare Group. Since 2004 Joan has helped organise several bird surveys in her local area, covering many properties that now host wind turbines for the Capital and Woodlawn wind farms.

"As a landowner involved with the wind farm, I am very pleased to report that I have not seen any wind turbine related bird fatalities on our property, and the turbines have been operating now for 2 ½ years. I love birds and there is no way I would have gone ahead with the wind farm if I had believed that the turbines would result in lots of bird fatalities."





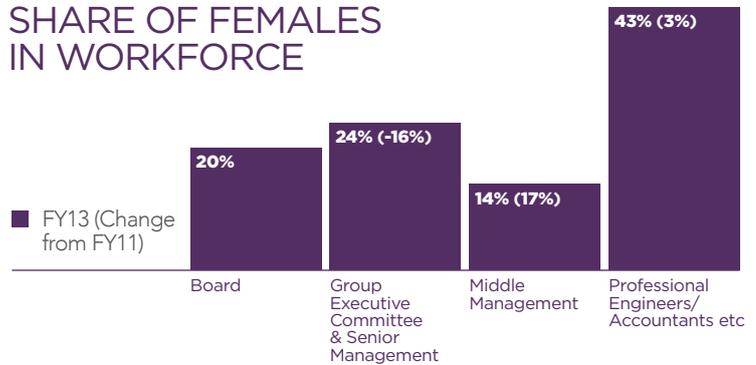
## Diversity and People

### Infigen's Diversity Target and Objectives

Infigen's team consisted of 172 people managing 24 operating wind farms, and solar and wind development pipelines in Australia and the US.

Infigen aims to provide a work environment in which all employees may excel regardless of race, religion, age, disability, gender, sexual preference or marital status. Infigen maintains policies relating to diversity and workplace practices, including occupational health and safety. Infigen is committed to responsible corporate governance and has implemented a diversity policy as part of its corporate governance framework.

## SHARE OF FEMALES IN WORKFORCE



### TARGET AND OBJECTIVES SET IN FY12

#### Infigen's Diversity Target

Over the next two years increase the workforce participation of females and persons from minority backgrounds by 10% compared to 1 July 2011.

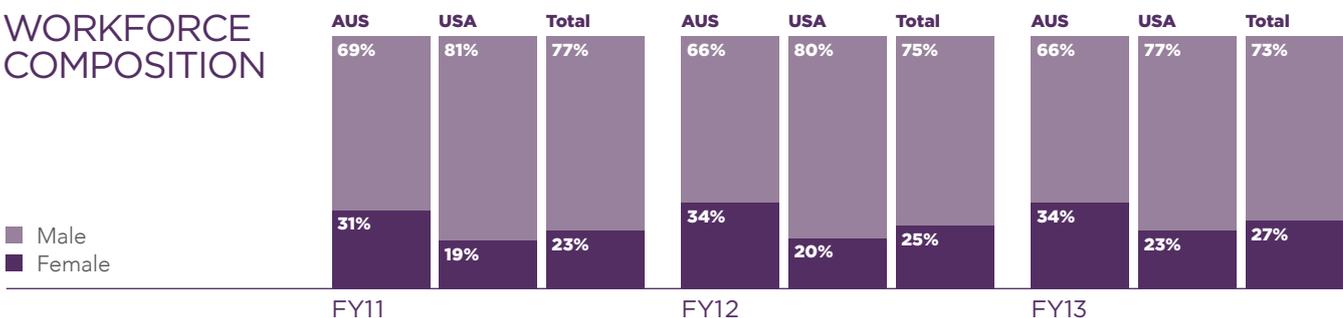
### PROGRESS IN FY13

Female participation in the Infigen workforce has increased by 15.6% compared with the 2011 financial year.

#### Infigen's Diversity Objectives

- 1) Establish a leadership development program for current and future leaders with specific diversity-related content to assist female and ethnic employees to develop the skills necessary to advance to more senior positions whilst creating a greater awareness in their male colleagues of the need to promote diversity.
  - 2) Require all external recruitment processes to shortlist at least one female or other minority candidate, two preferably.
  - 3) Engage tertiary institutions to help promote female careers in the renewable energy industry.
- 26% of the workforce has participated in leadership development programs.
  - Hosted three female undergraduate students for industrial placement.
  - Hosted and participated in UNSW Women in Renewable Energy network group in Australia and participated in the Women of Wind Energy forums in the US.
  - Established an informal women's network group within the US business.
  - Successfully required external recruitment consultants to submit at least one female candidate for most of the Australian recruitment undertaken.

## WORKFORCE COMPOSITION





## Policy and Regulations

### Australia

In 2013, wind technology is now cheaper than new coal and gas plants in Australia

A recent study<sup>28</sup> found that new wind farms in Australia can supply electricity at a cost significantly below that of a new coal or gas fired power plant. By the end of the 2012 calendar year Australia's total installed wind capacity reached 2,584 MW<sup>29</sup>.

### The RET Scheme

The Renewable Energy Target (RET) has been a successful industry development scheme that has resulted in significant regional investment in clean energy generation facilities and large reductions in greenhouse gas emissions. In 2012, over 13% of total energy generation came from renewable energy, enough to power over 4 million households and saving over 22 million tons of greenhouse gases<sup>30</sup>.

Since the splitting of the RET into large and small scale technology schemes in 2011, the large surplus of Large-scale Generation Certificates (LGCs) has for the most part arrested new development. The average LGC price for the year was 9% lower than the prior year.

In December 2012 the Climate Change Authority (CCA) released its final report of the RET review to the Commonwealth Government where it recommended no change to target trajectory and proposed quadrennial, rather than biennial, reviews of the legislation to improve investment certainty.

### Keeping the RET saves costs to consumers, supports the industry and reduces emissions

In line with the CCA's recommendations, Bloomberg's modelling<sup>31</sup> indicated that while reducing the target of the Large-scale RET scheme (LRET) could reduce the scheme's cost between 2013 and 2020 by \$1.9 billion, it would increase electricity prices by \$3.2 billion, resulting in a net cost to businesses and households of \$1.3 billion.

A reduced LRET target would also mean \$11.6 billion of lost investment, electricity sector carbon emissions increasing by 28 million tons between 2013 and 2020 and emissions intensity rising by 8 per cent over that period.



## CAMERON KRAMER

### PERFORMANCE ENGINEERING INTERN

"This is my second summer working for Infigen and I have learned more about wind energy than I could have ever imagined. Coming in, I knew nothing about wind turbines, but working in the Performance Engineering team has taught me how the turbines are designed and how the turbines operate on a day-to-day basis. The Performance Engineering team is full of outstanding team members and great mentors that have helped me build a strong foundation for my engineering career. I have thoroughly enjoyed my time here at Infigen and I thank everyone for the tremendous experience."

## US

### Record year for wind installations in the US

The US wind energy industry had its strongest year ever in 2012 in terms of new wind installations, making it the global market leader. The US connected over 13.1 GW<sup>32</sup> of new wind power capacity. The country now boasts 60 GW of installed wind power capacity.

The Federal Production Tax Credit scheme was renewed for new wind farm developments that begin construction prior to the end of 2013, while the Investment Tax Credit for solar development remains in place until December 2016 with healthy demand for solar PV projects under State based renewable portfolio standards.

The new build signal for all forms of electricity generation has been weakened by low natural gas prices. But increasing demand, reduced capacity investment, continuing retirement of coal fired power stations and increasing natural gas forward prices are expected to tighten capacity reserves and lift prices in the medium term. This is reflected in independent long term electricity price modelling.

28 Bloomberg New Energy Finance Report, January 2013

29 Global Wind Energy Council Annual Report, April 2013

30 Clean Energy Council Annual Report, March 2013

31 Bloomberg New Energy Finance Report, August 2013

32 Global Wind Energy Council, April 2013