

G'Day!

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Conference on

Risk Perception, Communication and Ethics of Exposures to Ionising Radiation
(RICOMET 2015), 15th to 17th June 2015 , Brdo Castle, Slovenia.

* I would like to thank the Organisers, and also the Department of Industry and Science, Commonwealth of Australia, for financial support for attending this conference.



A lot of interesting animals live in the ocean like Dolphins, Whales and Sharks.

Aborigines are the people native to Australia.

Pineapples and bananas grow in Queensland because it is hot.

Wombats, Emus and Koalas are special because they only live in Australia.

The middle of Australia is very hot, dusty and dry.

A lot of food is grown in Australia including grapes.

Miners dig for gold and diamonds in the ground.

It gets very cold in the mountains and in winter it snows.

Every year people race sail boats from Sydney to Hobart.

- Tropical 'Wet & Dry Seasons'
- Hot Summer, Mild Winter
- Hot Dry Summer, Cool Winter
- Warm Summer, Cold Winter
- Mild Summer, Very Cold Winter



MapFight



Germany

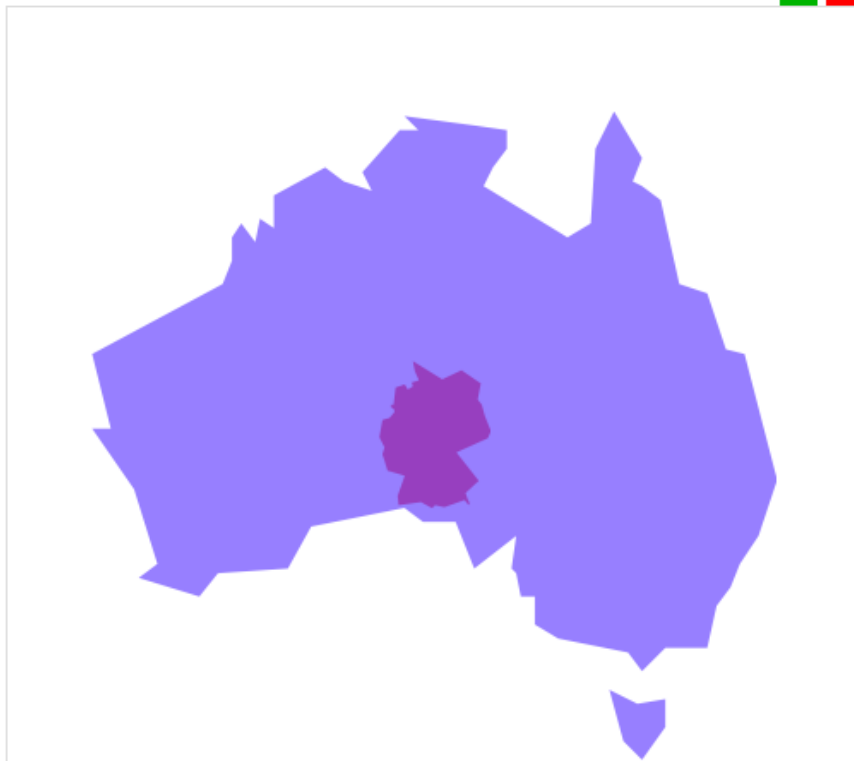
VS



Australia

Compare

Germany (357,114 km²) is **0.05** times as big as Australia (7,692,024 km²).



MapFight



United Kingdom



VS



Australia



Compare

United Kingdom (242,900 km²) is **0.03** times as big as Australia (7,692,024 km²).



MapFight



Slovenia



VS



Australia











Compare

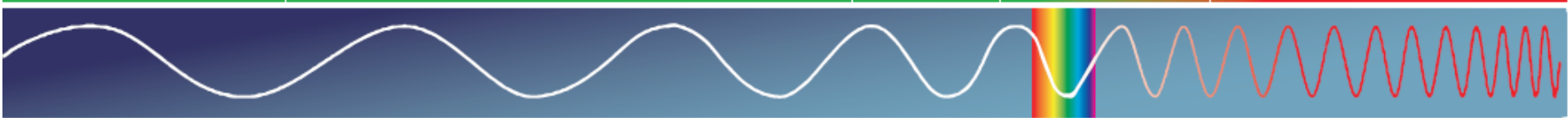
[Slovenia](#) (20,273 km²) is **0.0** times as big as [Australia](#) (7,692,024 km²).



Radiation: The Electromagnetic Spectrum

MRI	Power Line	AM/FM	TV	Mobile	Satellite	Heat Lamp	Day Light	Tanning	Medical	Nuclear
										
Static	ELF	Radiofrequency (RF) and Microwave				Infra-Red	Visible light	Ultraviolet	X-rays	Gamma Rays

Non-Ionising Electromagnetic Fields				Optical Radiation		Ionizing Radiation
induced currents	heating			surface heat	photochemical effects	broken chemical bonds



Frequency	50Hz	1 MHz	500 MHz	1 GHz	10 GHz	30 THz	600 THz	3 PHz	300 PHz	30 EHz
Wavelength	6000km	300m	60cm	30cm	3cm	10pm	500nm	100nm	1nm	10pm

Non-ionizing radiation

Exposure can lead to heating effects, but insufficient energy to cause molecular damage and long-term health effects.

Sources: Radio signals; mobile phones, phone masts, smart meters

Ionizing radiation

Exposure can cause molecular damage, tissue damage and long-term health effects including cancer. Sources: Nuclear medicine, radioactive sources from power plants

Victoria: Smart Meter Roll-Out

- The Victorian premier and his Energy Minister imposed a Mandatory roll-out scheme for electricity Smart Meters
- Smart Meters use radio signals to communicate data on usage to the electricity distribution company
- A State-wide, but local community based anti-smart meter campaign grew into a national force with strong international links
- These groups were not listened to by a government that denied there is any cause for concern
- Community Liaison Officers had to fire fight continually
- There was a 5-10% knock-back rate (refusal to have a smart meter).
- The rest of Australia is unlikely to follow a Mandatory approach to deployment



Example Smart Meters (above) and Pictures of on-site Signal Testing (below)



SMART METER ROLL-OUT: THE AUSTRALIAN EXPERIENCE - VICTORIA



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Our Products

- ✦ Radiation meters
- ✦ Wave Shields

Are you ElectriFrying or WiFrying your children's

Smart meter radiation health petition

Posted on September 9, 2011 // 0 Comments

Smart meters are also known as dumb meters by people concerned of microwave radiation being added to the existing high levels of electromagnetic radiation.

Stop Smart Meters Australia

Fighting for your financial & physical health, privacy, and safety in Australia



DO NOT FIT A SMART METER





Home Actions you can take Contact Us Sign the Petition Like our Facebook page

What are the issues? News Videos Share your Story How to use this site

Donate

Smart Meter Public Demonstration.

Posted on April 26, 2012 by Stop Smart Meters Australia

Community concerns with smart meters are increasing






Are you ElectriFrying or WiFrying your children's brain cells?

YouTube mobile phone tumours

Smart Meter & Cell Tower Radiation @Newhart Middle School (Video 1)

SarahParalegal Subscribe 17 videos

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 <p>SMART METER EMF Radiation by SarahParalegal 864 views</p>	 <p>Newhart Jr High EMF Radiation by SarahParalegal 156 views</p>	 <p>Cell Towers EMF Radiation at Mission by SarahParalegal 468 views</p>	 <p>Smart Meter & Cell Tower Radiation @Newhart Middle School by SarahParalegal 1,162 views</p>	 <p>2011 Perdido Key VacationMariner301.wm by SarahParalegal 60 views</p>
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Australia's Radioactive Waste

- **Australia generates less than 40 cubic metres (m³) of low level radioactive waste annually**, which is smaller than one shipping container.
- By comparison, Britain and France each produce around 25 000 m³ of low level waste annually—over 600 times more than Australia.
- **Australia generates less than 5m³ of intermediate level radioactive waste annually.**
- **There is no high level radioactive waste in Australia.**

- **Country Volume of waste as of 2010**

- Australia 4,255 m³
- Spain 43,252m³
- USA 17, 252 672m³

The Media Over-Reaction

Technology

Time is ticking for Australia's first nuclear waste dump

June 5, 2015 5:23am

EMILY MOULTON news.com.au

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www.srcl.com/radioactive-waste

by opposition to a national radioactive waste dump in Western Australia

commitment to volunteerism would require providing affected communities with ample time to deliberate on their willingness to host or live near a facility
thing the full list of nominated sites.

government stresses that it does not want to impose a nuclear waste facility on any community, there is no guarantee that this Government (or a future
ever to earlier habits of trying to do so. Community consent is in fact not a prerequisite for its siting decision.

as state legislation in place prohibiting the storage of radioactive waste from outside the state. This means that, although the National Radioactive
ment Act gives the Minister the right to override state legislation, the voluntary and democratic aspects of the WA nominations are highly

the homelands: community opposition to a national radioactive waste dump in WA <http://www.onlineopinion.com.au/view.asp?>

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raschki, 15 May 2015 Western Australian iron ore company Gribble Metals' nomination of a section of its land to host Australia's
tent facility comes as the third known nomination in WA. The two-month nomination period for the project closed on May 5. Another
indowner in Leonora, against local opposition but supported by Leonora Shire. The Shire had been keen on nominating freehold land

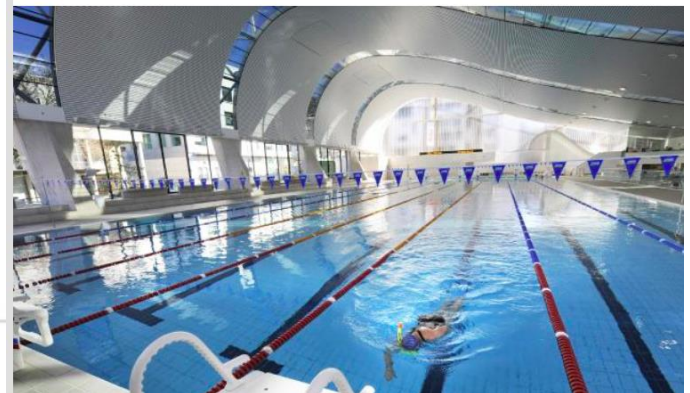


Low level nuclear waste drums. Drums like these are stored at the ANSTO facility in Lucas Heights.

Australia has accumulated over 4900 cubic metres of low to mid level nuclear waste over the past 40 years. That's the equivalent of two Olympic sized

Storage facility

Australia's dangerous time bomb



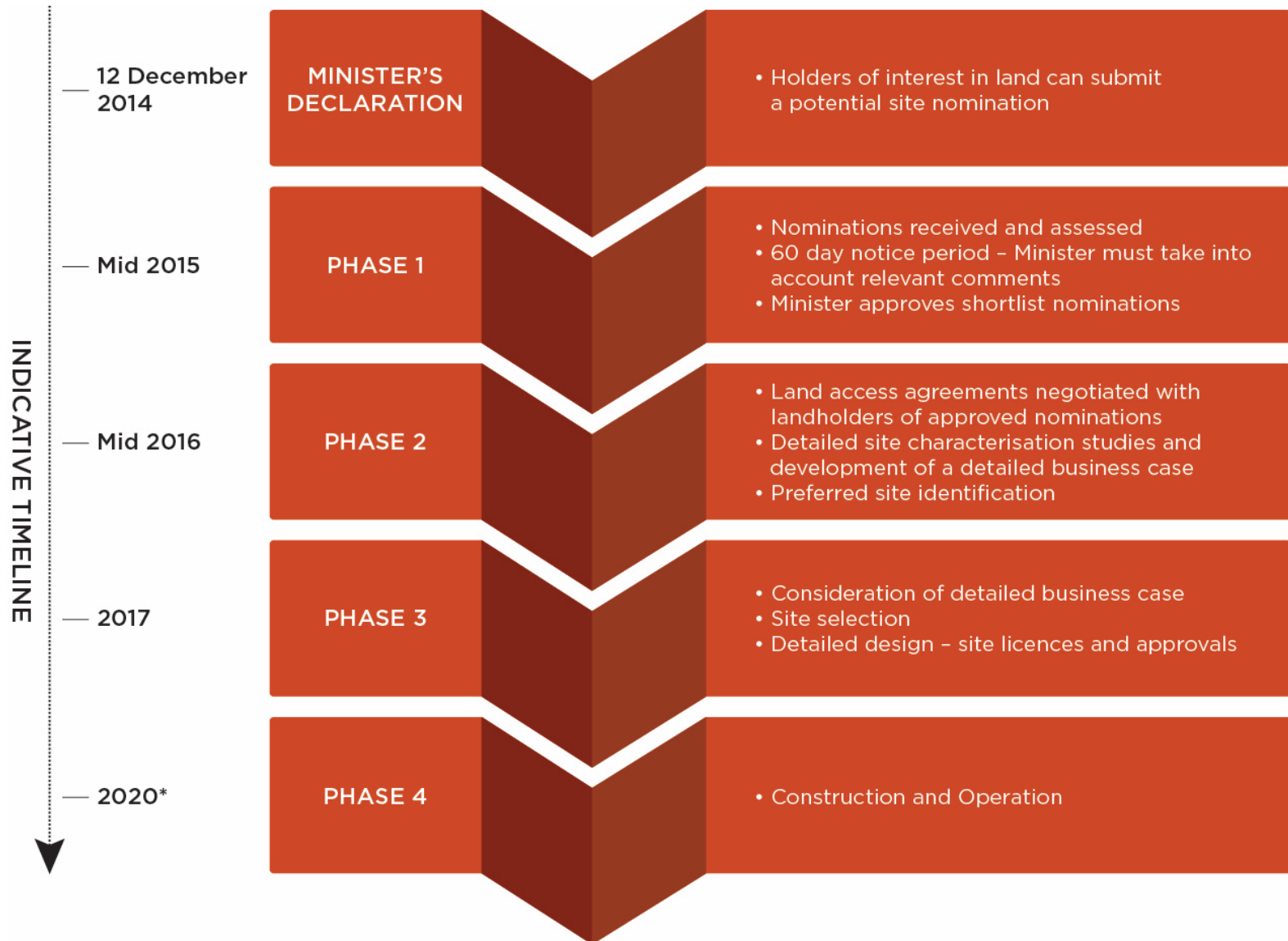
Australia has accumulated almost two Olympic size swimming pools worth of nuclear waste in four decades. It's a drop in the ocean compared to other countries. Picture: Phil Rogers

WHEN you hear the words 'nuclear facility', Chernobyl and Fukushima spring to mind.

The Process

- A voluntary process is in place whereby site owners have nominated land for consideration for the National Radioactive Waste Management Facility (NRWMF)
- The Concept design is for engineered shallow disposal of LLW and above-ground storage of ILW
- Nominated Sites have been assessed by a Multi Criteria Siting Analysis (MCSA) methodology overseen by an Independent Advisory Panel
- A Long-list of Volunteered sites will enter a 60+ Day consultation period for identification of a short list of 3 or 4 sites
- The short-listed sites will enter a detailed community consultation phase and site geotechnical and environmental studies

A Voluntary Process



*Indicative only - is dependent on licences and approvals.

Conclusions

- For *all* radiation issues, mandatory siting processes are not effective. They generate mistrust and the politics of grievance
- In addition to trust in radiological protection, it is the form of governance that is important for *both* ionising and non-ionising radiation issues
- Public and key stakeholder values must be able to influence key decisions such as siting and question radiological safety standards
- Transparency and Accountability are most important when seeking to respond to and accommodate perceptions of risk from radiation

THANK YOU

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