



## Smart meters have been installed in our neighbourhood

### Why we should care...

**HUMAN HEALTH and the ENVIRONMENT:** Electromagnetic radiation, such as that emitted by smart meters, has proven negative biological effects on living tissue.

**SAFETY:** Problems include interference with a wide range of medical and electronic devices, radiofrequencies coupling onto household wiring, plus increased vulnerability to atmospheric events, leading to fires, explosions, and damaged appliances.

**PRIVACY and SECURITY:** Smart meters collect and wirelessly transmit private data. Detailed profiles of our activities can be deduced from the unique electrical signature of each appliance. Security experts warn that wireless smart meter technology is especially vulnerable to remote cyber-attack and electricity theft. Two-way communications also give power companies the ability to remotely shut off power.

**HIGHER BILLS and MINIMAL ENERGY CONSERVATION:** A one year Canadian study on Toronto Hydro customers showed that smart meters increased bills for about 80% of consumers, with no significant energy conservation.

**ELECTRICITY CUSTOMERS ARE PAYING for SMART METER BUNGLER:** The Victorian Government mandated power distributors in 2006 to use their 'best endeavours' to install smart meters in every household and small business by the end of 2013. Despite the Victorian Auditor-General's scathing conclusions in 2009 regarding the flawed cost benefit study behind the roll-out, and Deloitte's 2011 cost benefit analysis, which concluded that the roll-out would result in net costs to customers of \$319 million dollars (based on the dollar's value in 2008), the program continued. **Every Victorian customer has been levied a charge to pay for the roll-out since 1st January 2010.**

**However, there is NO legislation obligating customers to accept a smart meter.**

**Smart meters take away the choice to manage electromagnetic pollution in our own homes.**



### Health Effects

**Tens of thousands of smart meter complaints** have been submitted to overseas authorities. In Victoria, as elsewhere, people have become sick when smart meters are installed, even people who were not previously electro-hypersensitive. According to a peer-reviewed **Victorian 92-case series**, the most common symptoms are:

- insomnia
- headaches
- tinnitus
- fatigue
- cognitive disturbances
- nerve pain, tremors etc.
- dizziness
- heart palpitations
- nausea

**About 3% of the population is sensitive to electromagnetic radiation** according to overseas surveys, with some countries showing significantly higher results. Numbers are growing. Many scientific studies also show systemic long-term effects.

*"...exposure is additive and consumers may have already increased their exposure to radiofrequency radiation through voluntary use of wireless devices... It would be impossible to know how close a consumer might be to their limit, making safety an uncertainty with the installation of a mandatory SmartMeter."* Dr Namkung, Public Health Officer, Santa Cruz County, 2012: **Health Risks Associated with SmartMeters**.

**The American Academy of Environmental Medicine has opposed** the installation of wireless smart meters "based on a scientific assessment of the current medical literature... Current medical literature raises credible questions about genetic and cellular effects, hormonal effects, male fertility, blood/brain barrier damage and increased risk of certain types of cancers...": **Resolution to Public Utilities Commission**.

*"We have evidence...that exposure to radiofrequency [RF] radiation... increases the risk of cancer, increases damage to the nervous system, causes electrosensitivity, has adverse reproductive effects and a variety of other effects on different organ systems. **There is no justification for the statement that Smart Meters have no adverse health effects.**"*

Dr. David Carpenter, Director of the Institute of Health and the Environment, University at Albany, State University of New York; former head of the New York State Department of Public Health.



*"The bone marrow of a child's head absorbs 10 times more radiation than that of an adult."*

Dr. Devra Davis, Epidemiologist and founding director of the Board on Environmental Studies and Toxicology at the United States National Academy of Sciences.

*"There are no current, relevant public safety standards for pulsed RF involving chronic exposure of the public, nor of sensitive populations, nor of people with metal and medical implants..."*

Dr. Poki Namkung, Public Health Officer, County of Santa Cruz, pp. 9—18, Att. B: **Health Risks Associated with Smart Meters**.

Radiofrequency electromagnetic fields were classified by the World Health Organization as a **Group 2B Possible Human Carcinogen** in 2011. *Current research suggests this should be upgraded to **Group 2A, 'probably carcinogenic'** (Davis et al. 2013) or **Group 1, 'carcinogenic'** (Hardell & Carlberg 2013).*





## Smart meter radiation exposure is 24/7 and involuntary

Scientists know that electromagnetic radiation has a cumulative effect on the body. Pulsed or modulated signals can be especially harmful. Research indicates that RF microwave radiation is linked to increased risk of cancer, neurological diseases such as Alzheimer's, and impairments to immune function and fertility.

In the mesh network deployed by CitiPower, Powercor, Jemena and United Energy, each meter receives and repeats short, sharp pulsed signals from nearby homes all day and night. According to information filed by Pacific Gas & Electric Co., this results in a median of 9,600 transmissions per day at each meter, with a maximum of 190,000 transmissions per day. In the WiMAX network deployed by AusNet Services radiofrequency (RF) emissions may extend up to around 50 kilometres.

- 'Collector hubs' (Relays and Access Points) add to electromagnetic pollution in the home and neighbourhood. Why won't power distributors tell us where these are?
- RF microwaves emitted from base station towers for AusNet Services smart meter transmissions add to electromagnetic pollution in the home and neighbourhood.
- 'Dirty' electricity (high frequency voltage transients) from the switched-mode power supply of smart meters and from RF coupling on to household wiring increases electromagnetic pollution in the home and neighbourhood.
- Home Area Network wireless transmissions between household appliances (such as washing machines, fridges and air-conditioners) and In-Home Display units add to electromagnetic pollution in the home and neighbourhood.

*Why wasn't the precautionary principle taken into account, as called for elsewhere, in the choice of technology for Victoria's smart meter roll-out, considering the potential dangers of electromagnetic fields and their effect on the environment?*



### People Speaking Up



Concerned Victorians have taken a number of steps to regain their rights. Elsewhere, the backlash against smart meters has been so strong that **numerous** authorities now allow customers the right to opt out of a transmitting smart meter. These include *BC Hydro, Hydro-Québec and Hydro Westmount* in Canada, *SRP, PG&E, San Diego Gas & Electric, Southern California Edison, La Plata Electric Association, Florida Power & Light Co, Lakeland Electric, Georgia Power, Hawaiian Electric Co, Kauai Island Utility, Commonwealth Edison Co, Ameren Illinois, Central Maine Power, Baltimore Gas and Electric Co, Pepco, Delmarva Power & Light Co, Southern Maryland Electric Cooperative, Massachusetts Electric Company, Nantucket Electric, Consumers Energy, DTE Electric, NV Energy, Central Hudson Gas & Electric Corp., Ashland Electric Department, Portland General Electric, Eugene Water & Electric Board, Memphis Light, Gas and Water and Green Mountain Power* in the USA.

#### If you haven't already had a smart meter installed:

Keep your No Smart Meter sign on your meter box! (Many people continue to lock their gates etc.). Back this up with written advice to your power distributor.

#### All concerned Victorians:

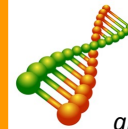
Continue to make your views known to your Member of Parliament and Upper House Members. Visit, phone and write to them. Contact details for your electorate are at: <http://www.parliament.vic.gov.au/electorates/>

Continue to write to the Minister (keep a copy), listing your concerns:

Hon Liliانا D'Ambrosio, Minister for Energy and Resources, Level 36, 121 Exhibition Street, Melbourne VIC 3000. *By email: [lily.d'ambrosio@parliament.vic.gov.au](mailto:lily.d'ambrosio@parliament.vic.gov.au)*

For investigating and resolving disputes with your power distributor and electricity retailer contact the Energy and Water Ombudsman Victoria: Freecall 1800 500 509.

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*"The strong regular transmissions from wireless smart meters are particularly harmful and more likely to lead to DNA damage, cancer and autism."*

Dr. Andrew Goldsworthy, Hon. Lecturer Imperial College London: **How Smart Meters May Cause Autism and Cancer.**

*"There are numerous scientific studies indicating adverse health effects can arise from even very low levels of RF exposure.... It is for such reasons that over 40% of the World's populations have exposure guidelines substantially more rigorous than those provided by ICNIRP." [...The Australian RF standard is based on ICNIRP'S 1998 guidelines.]*

Dr. Isaac Jamieson, PhD DIC RIBA ARB DipAAS BSc(Hons) Arch MInstP: p.4, **RF / Microwave Radiation Risk Awareness.**



*"...we are not the only species at jeopardy, practically all animals and plants may be at stake."*

Dr. Olle Johansson, Assoc. Prof., Head of the Experimental Dermatology Unit, Department of Neuroscience, Karolinska Institute, Sweden: **Letter to the California Utilities Commission.**

*"...even at the distance of a football field from the Smart Meter, the power density received may still be biologically significant."*

Dr. Ronald Powell: **Biological Effects from RF Radiation at Low-Intensity Exposure, based on the BiolInitiative 2012 Report, and the Implications for Smart Meters and Smart Appliances.**



This flyer is available at: **[www.stopsmartmeters.com.au](http://www.stopsmartmeters.com.au)**