# Annual Report 2014-2015



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# About our organisation

Doctors for the Environment Australia is a voluntary organisation of medical doctors in all states and territories. We work to address the diseases – local, national and global – caused by damage to the earth's environment. For example, climate change will bring to Australia an increased burden of heat stroke, injury from fire and storm, infectious diseases, social disruption and mental illness; whilst in the developing world it will bring famine and water shortage.

### Protecting health through care of the environment

The medical profession has a proud record of service to the community. This record not only includes personal clinical care, but also involvement in global issues that threaten the future of humanity. We aim to use our scientific and medical skills to educate governments and industry, the public and our colleagues by developing educational materials such as policies and posters and by direct contact, in the endeavour to highlight the medical importance of our natural environment. To our patients we try to provide a role model in the care of the environment, for this is part of a preventative health ethos.

# Chair's report



The year 2014-15 has once again been increasingly active for Doctors for the Environment Australia (DEA) and I thank all who have contributed so much during it. The challenges remain as large and are becoming increasingly urgent but there have been many positive developments with DEA continuing to be at the forefront in advocating to protect health through care of the environment.

#### Engagement with other medical organisations

For many years engaging other medical organisations has been a priority for DEA and over the last year we have begun to see many positive results. Our members have visited most of the Federal, State and Territory branches of the Australian Medical Association (AMA) and discussed with their leaders the major environmental issues affecting health, with a special focus on the widespread manifestations of climate change. The AMA Federal President, Professor Brian Owler spoke on this issue with particular emphasis on intergenerational theft at our national iDEA15 meeting. I have represented DEA on the newly formed AMA Climate Change Working Group tasked with devising a membership survey and making recommendations for revision of the AMA Position Statement on Climate Change and Human Health (2004, Revised 2008). DEA 2014 and 2013 national student representatives Grace Davies and Alice McGushin (now with AMSA) respectively presented a very moving and powerful lecture at the joint AMA, World Medical Association H20 World Health Summit in Melbourne on November 14<sup>th</sup> 2015 in relation to climate change and health.

Representations on climate change policy were made by DEA to the Royal Australasian College of Physicians (RACP) and Laureate Professor Nicholas Talley, President of RACP, demonstrated strong leadership during the launch of the Lancet Commissions Report in June. DEA looks forward to expanding this interaction and several DEA members have been appointed onto the newly formed RACP Climate Change and Health Working Party.

#### iDEA Conference, Sydney March 2015

Once again DEA's student led educational conference was an event not to be missed. Conference convenor Todd Gregory and his band of innovative and industrious fellow students and doctors produced an event with outstanding content (see page 31 of this report). Former Federal Liberal Leader of the

Opposition, Hon John Hewson AO spoke about the economic rationale and strategies for tackling climate change; former Chief of Defence, Retired Admiral Chris Barrie AC addressed the major geopolitical risks inherent in climate change and representatives from the three major NSW political parties were involved in a panel discussion, to mention just a few of the presentations.

Workshops preceding the conference were very well attended and accredited for the Royal Australian College of General Practice (RACGP) Continuing Professional Development (CPD) points.

#### Policy and Advocacy Officer, Registrar in Public Health

The appointment of Dr Sallie Forrest as DEA's Policy and Advocacy Officer incorporating an accredited training year towards her Public Health training was a big step forward for DEA as a recognised public health educational body. Sallie co-authored DEA's comprehensive and timely report "No Time for Games: Children's Health and Climate Change" with David Shearman. This report was launched by Professor Fiona Stanley AC in Perth on 31 May 2015 and highlights the present and future risks to child health from unmitigated climate change and the actions required to prevent many of the predicted devastating consequences. Significant wide spread media interest was gained from the report and we anticipate it to continue to be a useful document with more details presented in section ? of this report.

#### **Engagement with Federal Politicians**

The main barriers against introducing measures which are needed to effectively and urgently tackle climate change are not the lack of scientific evidence or alternative technologies or even an economic business case. The barriers are now fundamentally institutional, ideological and political.

It is up to DEA and many other organisations to convince political leaders that the costs to health and to lives; to absenteeism and loss of productivity and eventually to jobs; to farms and forests and foreshores; to infrastructure and rising insurance costs; to geo-political tension and even conflict over inadequate food and water and other resources; and to re-settling desperate environmental refugees, will far outweigh the costs of an intelligent, staged yet urgent and relentless transition from fossil fuels to renewable energy technologies. This requires bold political vision and leadership.

Dozens of DEA members, including student members whose role as future leaders is particularly valuable, visited Federal politicians over the last year. ALP members were visited in the lead up to their National Conference to highlight the importance

of health and environment issues when setting their future policies with particular emphasis on our coal industry and air pollution threats to health. Coalition members were targeted in collaboration with AMSA in the lead up to Australia's Emission Reduction Target announcements for the UN COP 21 meeting in Paris later this year.

The very important roles of the Greens Party's Federal representatives, Palmer United Party Senators and non-aligned Senators has also been recognised and visits have been carried out with several of them.

#### Launch of the Lancet Commissions Report

This major new report *Health and climate change: policy responses to protect public health,* launched in June 2014 followed an initial report launched in 2009 which stated that: *Climate change is the biggest threat to global health of the 21<sup>st</sup> century.* The 2015 report has a more positive call for action and states:

Tackling climate change could be the greatest health opportunity of the 21<sup>st</sup> century.

DEA members attended the Australian launch of the report in several centres and featured in media articles surrounding the report. The report reinforces the scientific literature regarding the dangers of climate change and outlines initiatives being taken in a number of areas including adaptation, food insecurity, infectious diseases, environmental migration and protection of ecosystems.

The technological advances and the macro-economic and micro-economic implications of mitigation and adaptation were also addressed with a clear call for decisive political action at the local, national and global levels.

#### Divestment

In addition to the environmental and health impacts, the Australian and global economies will suffer enormously if climate change is not urgently curtailed, a reality which is still to dawn upon many political leaders. To keep the average annual global atmospheric rise to below 2°C, around 75-80% of already known reserves of fossil fuels will have to remain in the ground.

In the absence of responsible government constraints and a clear plan for the future, it is no wonder that the world wide divestment movement is gathering great traction and momentum. Led by Helen Redmond, DEA members throughout the country have joined with many other groups to encourage personal, institutional, corporate, banking and even sovereign (Norway) divestment from existing and planned fossil fuel enterprises.

# House of Representatives Standing Committee on the Environment public hearings into the Register of Environmental Organisations

This Senate Committee was instituted by the Federal Government to be assured that all environmental organisations registered in Australia are acting in an open, transparent, accountable and legal manner to justify their continuing receipt of tax deductibility status. This is an issue vital to DEA's ability to operate and we made a submission to retain that status and we expect to be called to a hearing later in 2015.

#### Other DEA activities

DEA members have been very active in several spheres over the last year including continuing to highlight the health risks poses by the Unconventional gas (UCG) industry, with several jurisdictions and opposition parties having now placed a moratorium on hydraulic fracturing (fracking) until more reassurance about its environmental and health consequences has been obtained. Marion Carey and George Crisp have continued to provide expert scientific advice on this topic as well as others including air pollution, with DEA participating in a National Clean Air Workshop in August 2014. Dimity Williams continues to ably lead DEA's Biodiversity and Forestry advocacy and Eugenie Kayak has been a tower of strength in many arenas including the ongoing structure and stability of DEA. In spite of health challenges, David Shearman remains the diligent and resourceful cornerstone of DEA.

Our Treasurer Hakan Yaman has kept a close eye on the finances and Kristen Pearson has been very active in fundraising and organisational matters. David King, Malcolm Forbes, Robert Hall, Rohan Church, Tim Senior and student representatives Sarah Cohn and Kate Wheldrake have made many valuable contributions during the year. Rally running, cycling, hill climbing and social events involving student members have been socially and financially valuable.

In particular, DEA relies heavily on its voluntary members and there have been many other members who continue to selflessly provide their time and expertise in assisting DEA to work towards our objectives and we sincerely thank them all.

We also thank Merryn Redenbach for her work with DEA as our Research and Liaison Officer up till January 2015 and wish her well with her future advocacy work.

Finally special thanks go to our tireless Administrative Officer Joy Oddy, our newly appointed Media Officer Carmela Ferraro and Policy and Advocacy Officer Sallie Forrest for their great work during the past year. The appointment of these positions has made an enormous contribution to a significant growth in DEA's development, media presence and engagement of the wider medical profession – a growth that we look forward to building on and expanding in the following year.

Professor Kingsley Faulkner AM

Kingsey Faul

Chair

# Climate change and health

Working to address climate change is inherent in all our activity on fossil fuels, renewable energy and protection of biodiversity described in later sections of this report.

2014-2015 was notable as the first year that carbon emissions levelled off globally, and there is optimism as China and the US make significant international commitments to emissions reductions in preparation for global climate change negotiations in November 2015. It is clear international momentum for action is building. For the first time, Dutch citizens successfully sued their government over inaction on climate change, September saw the largest climate march in history with an estimated 400,000 people rallying in New York, and the Pope issued a comprehensive encyclical calling for global action. The Guardian newspaper helped to draw vital attention across the world to the link between burning fossil fuels and climate change with their campaign entitled 'Keep It In The Ground'. The Divestment movement has grown (see page 27), further highlighting the necessity of a transition away from fossil fuels.

DEA has actively sought to convey to the Australian public the health implications of international events; in November Sallie Forrest, DEA's Policy and Advocacy Officer, was interviewed live on ABC 24 about the IPCC's Fifth Assessment Report on Climate Change. In June, the Lancet medical journal released a major report entitled, "Health and Climate Change: Policy Responses to Protect Public Health"; DEA's media release led to two opinion pieces Sydney Morning Herald and the West Australian and quotes in a Medical Observer article. Nick Watts, DEA member and lead author of the report, undertook an interview on Radio National's *Life Matters* programme.

Unfortunately while the situation internationally looks increasingly positive, Australia has moved backwards to become regarded as a laggard. We became one of only two countries to withdraw substantial climate legislation with the repeal of the carbon pricing mechanism.

Fortunately the Renewable Energy Target (RET), Clean Energy Finance Corporation (CEFC) and Australian Renewable Energy Agency (ARENA) survived, however the RET has been effectively under review since the government was elected in 2013 causing significant uncertainty to the industry. DEA wrote<sup>6</sup> to the RET review to highlight that the panel had excluded health and social considerations from the report and therefore the true cost of coal. DEA addressed the health positives of the previous RET in an article<sup>7</sup> on the ABC Drum. A wound back RET was finally agreed in parliament in June 2015. Further cause for concern was the \$4 million of government funding for 'climate confusionist' Bjorn Lomborg to the 'Copenhagen Consensus Centre' at University of Western Australia (UWA). DEA wrote to UWA to highlight our concern about his funding and scientific methodology. Eventually UWA overturned the decision to hire Dr Lomborg.

DEA members were an essential part of a successful to encourage the Royal Australasian College of Physicians to divest from fossil fuels. Around Australia, DEA committees met with state AMA branches to advocate for the pivotal role of the medical profession in addressing climate change. In February, a DEA cohort met with the Federal AMA President and Secretary General. We were pleased to see some strong public statements<sup>8</sup> from Professor Brian Owler, AMA endorsement of the Australian Academy of Science's report on health and climate and the establishment of a climate change working group to review the AMA's relevant policy. With DEA's Chairperson a member of the working group we will continue to encourage the AMA to act more boldly.

DEA's signature project was the release of our report "No Time for Games: Children's Health and Climate Change" in May (see page 25).

In addition, DEA has visited nearly all Labor shadow cabinet and outer shadow cabinet members to press for recognition of health issues relating to climate change in the revised National Platform (see page 33).

Many members have contributed individually to the national debate; for example Kingsley Faulkner had an article published in the Surgical News, Sally McIlroy and Grace Davies wrote an opinion piece for the Medical Observer<sup>9,10</sup> and Eleanor Evans established an online webinar. Drs Mark Braidwood and Tim Senior wrote for Croakey health<sup>11,12</sup>, David Shearman for the Canberra Times<sup>13</sup> and Crikey<sup>14</sup>, and we had an article published on the ABC Drum<sup>15</sup>. Medical student Alice McGushin from Tasmania's west coast was featured by the rural ABC on her endeavours to address climate change globally.<sup>16</sup>

### **G20** initiative- letter to Mr Abbott

This DEA initiative is an example of how we work to build public awareness and pressure relating to the health impacts of climate change.

The Prime Minister declined to include consideration of climate change in the Agenda for the G20 meeting in Brisbane in November 2014. His priority for the meeting was international economic growth. Clearly he did not accept that climate change as a crucial factor impairing effective growth. For example in some countries reparation for extreme weather events is an increasing part of the budget.

An open letter<sup>17</sup> to the Prime Minister, initiated by Tony McMichael and Stephen Leader, appealing to him to reverse his decision was published in the Medical Journal of Australia. The letter was co-authored by 12 eminent scientists and health experts, including DEA's National Secretary David Shearman and six members of DEA's Scientific Advisory Committee<sup>18</sup>.

The letter to the Prime Minister was sent to all Coalition members with a covering letter 19 from DEA.

There was an excellent response in the media, including *The Australian*, while *The Guardian* broke the story internationally.<sup>20</sup>

We note that in the end, climate change was extensively discussed at the G20 meeting and President Obama made a powerful statement about the need for action.<sup>21</sup>

#### **Monster Climate Petition**

At the time of the G20 summit Fiona Stanley, a member of the DEA Scientific Advisory committee, led a key group of women in the launch of a website<sup>22</sup> to collect signatures for a petition to the House of Representatives, requesting immediate and drastic reduction of carbon emissions.

Fiona Stanley said 'We are inspired by the women of 1891 who in Victoria collected almost 30,000 signatures in five weeks requesting the vote for women. Almost one in ten of Victoria's adult women signed this unprecedented petition. The sheets of signatures were glued onto a 260 metre roll of cloth and rolled on a spindle. It took two men to carry the petition into parliament. It became known as the 'Monster Petition.'

## Action on fossil fuels

Doctors for the Environment Australia continues to recommend curbing coal and gas production, based upon their contribution to both greenhouse gas emissions and to air pollution.

We oppose the development of new coal mines in Australia because renewable energy alternatives are available and because the export of coal is incompatible with the world containment of green house emissions.

### Air quality and pollution

Air pollution is a greatly neglected public health issue in Australia despite an estimated 3,000 deaths due to urban air pollution annually – more than double the national road toll. There are an estimated 1,590 deaths per year in the four major Australian cities of Sydney, Melbourne, Brisbane and Perth attributable to long-term exposure to fine particulate pollution. Combustion of fossil fuels in coal fired power stations and vehicular transport are the two major sources of air pollutants.

This neglect results from the issue being categorised as environmental rather than health: accordingly responsibility is delegated to state Environment Ministers and Environmental Protection Authorities (EPA's). Commonwealth standards are not mandatory.

DEA has assessed many Environmental Impact Statements for mine and gas developments and in our view these are inadequate to monitor and prevent air pollution. As a result we have become significantly involved in advocating reform.

Doctors for the Environment Australia was proud to work with Environmental Justice Australia (formerly the Environment Defender's Office Victoria) and Nature Conservation Council of NSW to host the successful National Air Pollution Summit on  $2^{\text{nd}}$  -  $3^{\text{rd}}$  August, focussing on how to better protect Australians from air pollution.

The Summit brought together voices of affected communities, medical experts, environmental non-government organisations with an interest in air pollution and climate change, and regulators from NSW & Vic EPA's and the NSW Department of Health to discuss pressing issues in air pollution control.<sup>23</sup>

There was unanimous agreement by all groups at the summit on the importance of a national  $PM_{2.5}$  reporting standard. There was general agreement that there are broader failings of the current national system of air pollution regulation which should be addressed, and a sketch of next steps in the work required to move towards better air pollution control.

Our thanks go to Merryn Redenbach who lead and coordinated our effort; to Ben Ewald who addressed the summit on behalf of DEA; to David Shearman, Eugenie Kayak and Marion Carey who provided academic oversight of the collaboration; and to dedicated DEA members from four states who attended and participated in the Summit. The Summit was also a milestone for DEA in collaborating closely with two other major established groups on an issue where our interests align.

We followed up with a submission<sup>24</sup> on the proposed variation to the Ambient Air Quality National Environmental Protection Measures (NEPM) in which we stated that our comments on the standards and goals should be read in the context that we believe the NEPM is an ineffective mechanism, and stronger air quality legislation could lead to greater health gains. The necessary reforms were then detailed.

We proceeded to express our views to state ministers and in our visits to many members of the shadow cabinet, the aim being to encourage action by a future Labor government. Our activity in the media was increased with articles in The Herald<sup>25</sup>, The Age<sup>26</sup> and ABC News<sup>27</sup>. And we encouraged our members around Australia to raise the issue in the media with subsequent articles in the Newcastle Herald about pollution at Beresfield<sup>28</sup> and with an article in ABC on-line<sup>29</sup> about pollution at Port Augusta SA.

In March 2015 a response paper from the state environment ministers was published<sup>30</sup> and in April DEA made a submission<sup>31</sup> to this "Working towards a National Clean Air Agreement discussion paper".

At their meeting in July 2015 the Ministers delayed decisions on fine particle standards, and failed to address annual limits on coarse particles.

# Health aspects of the mining and combustion of coal

Here we highlight successful outcomes to our advocacy on the South Australian Port Augusta mine and power stations and on the closure by Alcoa of the coal mine at Anglesea in Victoria.

#### Port Augusta

This year we celebrated the announcement of the imminent closure of the power stations in Port Augusta and the Leigh creek brown coal mine.

DEA has been able to demonstrate significant health impacts on local communities from coal pollution based on research findings linked to measurement of air quality. Lung cancer rate is nearly double that compared to other towns and respiratory illness in children is the highest in the state. <sup>32</sup>

Our action to expose the health effects of the combustion commenced in 2011 with a community meeting in Port Augusta which became the foundation of widespread action by community, unions and business through *Repower Port Augusta*, by Port Augusta Council led by the late Mayor, Joy Baluch and by the organisation Beyond Zero Emissions (BZE) which advocated for concentrated solar thermal technology.

Subsequent key events in this journey have included: DEA holding a very successful extra-ordinary medical expert briefing at Parliament House in 2012 to highlight the massive health costs of coal and gas pollution<sup>33</sup>; a concurrent campaign to promote renewable energy<sup>34</sup>; and support from the RACGP, the AMA, and the AFPHM to stop coal burning and advocating a transition to renewable energy in Port Augusta based on health grounds.

This initiative recognised the importance of having new employment opportunities after closure of the power stations. Research by BZE demonstrates that Port Augusta has ideal wind and sun penetration for stand-alone CST (Concentrated Solar Thermal) with or without wind supplementation and that it is commercially viable. 35

In June 2015, Alinta Energy announced a closure date for the mine and power station of March 2018 at the latest.

#### Anglesea Coal Mine and Power Plant closure

DEA was both relieved and delighted by the announcement on May 12<sup>th</sup> by Alcoa Australia to close their coal mine and coal fired power station next to the Victorian seaside town of Anglesea on August 31<sup>st</sup> 2015.

For several years DEA has been actively supporting the local community to raise awareness of the potential health harms from the local coal industry. DEA members first spoke at an Anglesea public meeting in 2010, and over subsequent years DEA has published numerous articles and letters in the local media, beginning with this Geelong Advertiser article by Eugenie Kayak '*Too many questions about open cut coal*'<sup>36</sup>. DEA organised a local medical presentation in Anglesea '*Coal mining and combustion are a threat to human health*', spoke at public rallies and made a submission to oppose the application for an Electricity Generation License for the Anglesea Power Station from Alcoa of Australia Limited.<sup>37</sup>

In the months before the announcement of closure DEA wrote to potential buyers of the coal operations to highlight the health and ethical implications of continuing to operate so close to a community and local primary school. DEA's press release following the closure announcement also highlights some of our many activities over those years.<sup>38</sup>

This decision is a real win for DEA and other groups, with particular acknowledgment going to DEA member Jacinta Morahan who is a local resident and has worked tirelessly with her local community and the Surf Coast Air Action group to raise awareness of the health threats connected with this coal operation.

Although the industry may claim the closure was simply a market-based decision, we strongly suspect that action by DEA and other groups played a significant role including potentially influencing the market. There is no doubt that pressure to decommission coal fired power stations in the Latrobe Valley, especially Hazelwood, will now be heightened.

The Victorian Government is also now urgently looking at how to minimise fire risk of mines before the 2015/16 summer, with the Anglesea coal mine site included in the Terms of Reference<sup>39</sup> of the reopened Hazelwood Mine Fire Inquiry.

#### Other coal developments around the nation

DEA has contributed to the exposure of the potential health effects of many existing and proposed mine developments. Our practice is to review Environmental Impact Statements and other government reports and, if there are likely health impacts, a submission is made followed by articles, letters to Ministers and often appearance at planning committees. Many of our assessments have detected failures of the health impact assessment process and regulatory systems. Finding irregularities offers a chance of reforming or rejecting a proposal and so protect health. Successes are few but important.

In Queensland we have paid particular attention to the Carmichael mine because of its likely impact on water resources in the Galilee basin and on global greenhouse emissions, for it will export 60 million tonnes per annum of thermal coal. There were many irregularities in the approvals: the Independent Expert Scientific Committee on Coal and Coal Seam Gas (IESC) expressed concerns about the cumulative impact of the mine ground water. These concerns were then contested, inappropriately in our view, by an expert hired by the proponent. Our opinion was expressed in a submission to the Senate on Queensland Government Administration.<sup>40</sup>

DEA is profoundly disappointed that the Palaszczuk government has continued support for this risky mine.

Regulatory processes for the Acland mine in south east Queensland have received continued attention from DEA because of air pollution and noise affecting the inhabitants of the area.

Coal exporting developments in New South Wales opposed by DEA are detailed in our submissions to the Inquiry on Warkworth/Mt Thorley (excessive pollution)<sup>41</sup> and proposed Shenhua mine. Our concerns for ground water and food security were presented by Tim Senior at the planning Assessment Commission.<sup>42</sup>

Ben Ewald (DEA member NSW) detailed DEA's reasons for opposing the Terminal 4 coal loader at Newcastle because it will increase air pollution in Newcastle and will result in a great increase in coal trains through the city.<sup>43</sup>

DEA found that the noise impacts for Warkworth and Mt Thorley in NSW's Hunter Valley were not fully detailed. The data presented on  $PM_{10}$  as an indication of air pollution was in excess of World Health Organization (WHO) standards (and are likely to exceed national standards when they are revised) and so the mine poses an unacceptable health hazard to local inhabitants. The modelling for air pollution from blasting was inadequate particularly in relation to nitrous oxide. However even on the information provided large exposures are likely and will be sufficient to harm health. The economic argument for expansion was spurious when no economic assessment is made of the long term health costs which will be incurred by the state of NSW<sup>44, 45</sup>.

#### National advocacy on coal and health

"Coal is good for Humanity" and "Coal is essential for the prosperity of the world" were the recent words of our Prime Minister, Mr Abbott and our response was to send a letter to Mr Abbott<sup>46</sup> which was published in the Tasmanian Times<sup>47</sup>, in regional media<sup>48</sup> and on social media. This letter detailed the fact that coal is uneconomic when the public health outcomes are accounted for. When a response was received from Mr Abbott's office several months later we judged it was so negative it should be commented on in the national media. We passed it to Business Spectator who published *Second opinion? Doctors' coal concerns rebuked by Abbott Govt* <sup>49</sup>.

# Unconventional gas mining and health

DEA continues to deploy significant resources to the potential health dangers of unconventional gas (UG) development. Unregulated development threatens the three pillars of public health, from water contamination, air pollution from well heads and impaired food production. Furthermore its greenhouse gas impact is possibly only marginally better than that of coal. We act to inform communities of these issues through presentations and articles and to inform government at meetings and by submissions.

Our key work this year was a study in the Medical Journal of Australia<sup>50</sup> which documents confirmed incidents that have led to aquifer contamination as a result of unconventional gas operations, and may be one of the first peer-reviewed medical journal articles on this topic.

Our revised position statement on Unconventional Gas Development<sup>51</sup> is relevant to all our activities. DEA has compiled resources<sup>52</sup> to be used in community education.

Regulation of UG in Australia is under the jurisdiction of the states, appears irrational and rarely encompasses any health considerations. During the year 2014-15 we made submissions to inquiries in three states. The disparity of responses to presentation of similar scientific and public health evidence is an indictment of government in Australia.

#### **Tasmania**

In Tasmania DEA submitted<sup>53</sup> (submission number 75) to the inquiry into fracking, which resulted in the Tasmanian governments banning fracking for the next 5 years.<sup>54</sup> Potential harm to Tasmania's clean and green image and food production seems to have played an important role in the decision.

DEA owes an enormous debt to Rohan Church for preparing the submission and for meeting with Rebecca White MHA (Shadow Health Minister), Bryan Green MHA (Opposition Leader), Rob Valentine MLC, Mike Gaffney MLC, Craig Farrell MLC, in conjunction with Frack Free Tasmania, the Environmental Defenders Office, farmers and land holders. He wrote the submission, spoke at public meetings and published opinion article 55 and an article *Doctors Back Tasmanian Fracking Ban*56, both in The Mercury.

#### **Northern Territory**

By contrast, the inquiry in the Northern Territory to which DEA submitted<sup>57</sup> in May 2014 and then gave verbal evidence<sup>58</sup> to the Commissioner, resulted in a 225 page Report which said, "consistent with other Australian and International reviews,... the environmental risks associated with hydraulic fracking can be managed effectively subject to the creation of a robust regulatory regime". We disagree: a large number of reviews in other countries do not say that.

The Inquiry also recommended "that the NT Government form a Cabinet Sub-Committee, chaired by the Deputy Chief Minister and comprising the Ministers whose portfolios cover Lands, Planning and the Environment; Land Resource Management; Mines and Energy; and Primary Industry and Fisheries to oversee the work required for the NT to set the standard for a best practice regulatory regime".

DEA disagrees. Health was scarcely mentioned in the report and the guiding committee has no health expertise or input.

#### South Australia

A Parliamentary inquiry regarding UG is in progress to which DEA made a submission<sup>59</sup>. Professor John Willoughby and Kate Wheldrake (student member) appeared before the Parliamentary hearings.

Unconventional gas development for the south east region has been promoted by the SA government. Concerns expressed by DEA to the SA Minister for Health were unanswered, merely forwarded on to the Department for Manufacturing, Innovation, Trade, Resources and Energy.

The south east region embraces good agricultural land and vineyards so there is considerable community concern about impacts of UG on health, agriculture and water supplies. These concerns are shared by our colleagues in the Australian College of Rural and Remote Medicine and the Rural Doctors Association of South Australia. The attitude of the SA government is contrary to the values that were acted on by the Tasmanian government.

DEA produced a UG Gas Fact Sheet<sup>60</sup> for use in the south east community and an opinion piece on health and fracking was published in the Mt Gambier paper Border Watch<sup>61</sup>. DEA has also been active in advocacy with key decision makers in

government, particularly the two non-Labor government Ministers. Eventually the government succumbed to announcing an inquiry which was welcomed by DEA in a media release<sup>62</sup>.

#### Western Australia

The Western Australian government promotes unfettered development of UG with new areas being released for exploration in the south west in addition to the Perth and Canning Basins. Our role has therefore been talking at community events, writing letters, speaking on talkback radio and engaging with politicians. DEA member Greg Glazov presented at a Community Forum Perth in February and attended the Carnamah town declaration of a Gas-Field Free Community. Several other mid-west communities have also declared themselves "gas free".

The State Labor Party has recently committed to a moratorium on further exploration and extraction, subject to a more rigorous analysis of the risks involved, if they win government.

#### **New South Wales**

While DEA welcomed the NSW Chief Scientist and Engineer's "Final Report of the Independent Review of Coal Seam Gas Activities in NSW", concerns raised in DEA's submission were not fully examined. The Report described human health risks and uncertainties associated with exposure to toxic coal seam gas (CSG) chemicals, but concluded that risks can be managed through unprecedented regulation and monitoring. DEA responded in articles in The Conversation<sup>63</sup> and Climate Spectator<sup>64</sup> pointing out that major health concerns remain unresolved including regulatory inadequacies, cumulative chemical and mental health risks, safety breaches, and climate change.

The report did little to assuage either community or health concerns and DEA continued its work in support of communities living with CSG drilling nearby in southwest Sydney, and under new development in the Gloucester Valley. Many community talks were given in Sydney and beyond.

In the Camden gas field, health complaints emerged in residents living in close proximity to well heads. DEA undertook liaison with community members and the local Public Health Unit. This led to a meeting between stakeholders of the Camden CSG gas field "CSG in the Camden Basin and Health" including industry, local government, the Public Health Unit, community representatives and DEA. AGL, the gas company, has since announced that it will not proceed with the Camden gas field Northern Expansion Project.

A meeting was also held between DEA, the Commonwealth Office of Water Science and two scientists from National Industrial Chemicals Notification and Assessment Scheme (NICNAS) to discuss these organisations' roles in addressing health concerns association with CSG operations. Several concerns were raised about the limited scope of the briefing and activities. DEA emphasised that their focus on safety assessments of individual chemical additives used in hydraulic fracturing, while welcome, will be only a small contribution to the large amount of uncertainty regarding risks to human health posed by unconventional gas mining.

DEA sent a detailed letter to the State Minister for Health, Gillian Skinner, and conducted multiple visits to state public health officials during the year, to alert them of the DEA's concerns regarding the insufficiency and uncertainty of the NSW Gas Plan to ensure that human health would be fully protected.

DEA's efforts in NSW have consistently contributed to growing public understanding of the health concerns and uncertainties associated with CSG development. We contributed this knowledge to the NSW government's decisions to cancel Petroleum Exploration Licences PEL463 (Dart Energy) covering nearly the whole Sydney metropolitan basin, and PEL2 (AGL Energy) covering large parts of Sydney's water catchment, the Illawarra and the Central Coast in March and June 2015 respectively. Written submissions and oral presentations were made to Parliamentary inquires and Planning and Assessment Commissions made by NSW DEA members in 2012-2014. We played an important role in ensuring that health concerns were communicated accurately and thoroughly to inform both public opinion and policy decisions.

DEA notes that in 2015, the NSW State Government discarded a clause in the State Environmental Planning Policies (SEPP) relating to the precedent of economic value of assets over any other considerations. The legislation now requires that decision makers places economic, social [health] and environmental considerations on equal weighting. This is now in line with one of DEA's major recommendations made in our 2013 SEPP submission.

In conclusion there is little doubt that community rejection of an unconventional gas industry in NSW has increased the difficulty of the government to allow companies to proceed with operations until health and wellbeing concerns are fully addressed.

#### **Oueensland**

Unconventional gas development is reminiscent of a gold rush scramble to drill holes with permits handed out, apparently indiscriminately by the resources department.

Queensland DEA drew attention to the unregulated health concerns in an article to the Brisbane Times<sup>65</sup>, The Age and Sydney Morning Herald Op-Eds<sup>66</sup>. DEA's submission<sup>67</sup> to the Commonwealth Senate on the failures of the Queensland government was not accepted by the Committee for over 3 months thus making it too late to give evidence before the committee. There is a general opinion that this delay reflects the mounting discomfort of the two major Parties with the nature of evidence emerging. Our submission supported Senator Lazarus call for a Royal Commission as did our media release<sup>68</sup>.

In its report of March 2015<sup>69</sup>, the Committee recommended that the Federal Minister for the Environment declare a moratorium on any new approvals of Coal Seam Gas until an investigation is completed and reports back to the Senate on the effects of CSG mining activities in the Tara and Chinchilla areas on the health of local people, animals and crops, groundwater and on the quality of soil, water and air. It should also investigate the disposal of effluent containing human faeces around mining camps, local roads and agricultural land used for growing crops for human consumption and the degradation of water reserves in these areas.

# Renewable Energy a public health measure

We recognise that all our educational effort on fossil fuels as the main cause of climate change and its health consequences, needs to offer a cure, an alternative which is renewable energy.

Our efforts in 2014-5 were compromised by the irrational opposition by the Federal Government to renewable energy particularly wind. We published an article in the Medical Observer, "*PM's views ignore the winds of change*". The government reduced the Renewable Energy Target (RET) at a time when it needed to be maintained or increased.

On health grounds DEA opposed the government's action in a media release<sup>71</sup> and an opinion piece<sup>72</sup> in the Canberra Times which pointed out the reduction in RET would likely allow an increase in air pollution; the RET is a public health measure. We also wrote to Mr Richard Warburton, Chair, RET Review, Department of Prime Minister and Cabinet to document the health benefits of renewable energy, without response.<sup>73</sup>

DEA made a submission into the "Inquiry into the regulatory governance and economic impact of wind turbines"<sup>74</sup> in which we maintained that replacing carbon intensive energy generation with low carbon alternatives will be essential in limiting greenhouse gas emissions and their consequent health impacts. Wind and solar electricity generation technologies are currently the primary, and probably only, scalable technologies that can be deployed economically in the required time frame. Preventing the worst and potentially unmanageable health impacts of climate change, and in particular achieving the target of limiting global surface temperature rise to 2°C is dependent of the large-scale development of renewable energy, of which onshore wind generation is the cheapest option.

#### We stated

"There is currently no evidence linking wind turbines with health effects. From a medical perspective, there is no demonstrated or even plausible mechanism by which health impacts may be mediated. Electricity generation involving fossil fuel combustion has far greater health and environmental impacts than wind generation and greater full life cycle cost".



Our Renewable Energy Fact Sheet – "A prescription for a healthier, cleaner and cheaper future" was developed for use in community education and a Fact Sheet Concentrated Solar Thermal (CST) A unique opportunity for South Australia: Good for Health, Energy Security and Manufacturing 76 was produced to advocate replacement of coal power stations with solar thermal energy, both by the SA Committee of DEA.

# Children's health and climate change

Climate change is increasingly being recognised as a human health problem within the health and medical community as well as by the general public. Children in particular suffer disproportionately from its negative health impacts, and represent almost 90% of the global deaths and disability currently attributable to climate change.



In anticipation of and preparation for COP21, DEA released a comprehensive and groundbreaking report on climate change and children's health in late May 2014, entitled *No Time For Games: Children's Health and Climate Change*, focussing primarily on the Australian context but drawing from global scientific evidence and experiences.

The report methodically portrays the various harms to children caused by climate change, including direct harms caused by extreme weather events,

infectious diseases, and air pollution as well as serious threats to social determinants of health such as access to food, clean water, and social stability. The report emphasises the negative effects of climate change on child mental health and child protection, and also describes how climate change will put increasing pressure on both children's healthcare services and healthcare infrastructure itself. Lastly, the report addresses the issue of intergenerational injustice from failure to act, and calls for swift and decisive action to reduce carbon emissions.

Professor Fiona Stanley, AC FAA FASSA, one of Australia's most prominent paediatricians and member of DEA's Scientific Advisory Committee, penned the report's Foreword. Professor Stanley also launched the report in an event in Perth.

The report has been very favourably received, resulting in nationwide print, online, radio, and television media coverage, including separate DEA opinion pieces in the

Sydney Morning Herald and The Guardian. Along with inclusion in multiple regional publications and the Medical Observer, the report also received international recognition, with the UK's Royal College of Paediatrics and Child Health distributing the report to other UK medical colleges as they consider a new education programme in climate and health. The report even reached the African media.



The report has generated widespread awareness and conversation of these issues amongst the Australian medical community. DEA has since received multiple invitations to present the report's findings in both formal and informal settings, and is exploring other ways to further the influence of this report.

The report was distributed to all Federal MPs, State Health and shadow Health Ministers, and key organisations.

## Fossil fuel divestment

The fossil fuel divestment movement is gathering momentum and DEA continues to support and participate in it.

DEA released a Divestment FAQ sheet<sup>77</sup> in February 2015 in the lead up to the first Global Divestment Day, co-ordinated by 350.org. The FAQ's were designed to provide a starting point for individuals to divest, and to explain why a doctor or health professional might be impelled by duty of care to do so.

Global Divestment Day took place on 13-14<sup>th</sup> February 2015 in cities all around Australia and the world. DEA participated in many locations and spoke at the event in Melbourne.<sup>78</sup>



In 2015 DEA divestment advocacy also took a step off the streets and into the meeting rooms of medical organisations and superannuation funds.

DEA is a key participant in monthly teleconferences with a grouping of medical organisations also working in the space of divestment – the Health Divestment Coalition. Other organisations participating are Australian Medical Students' Association (AMSA), Public Health Association of Australia (PHAA), Climate and Health Alliance (CAHA) and Healthy Futures. The meetings are chaired by 350.org. The goal of Health-Divest is to co-ordinate divestment advocacy from the health sector and work together in a strategic and productive way.

This approach has already borne fruit with the announcement by the Royal Australasian College of Physicians (RACP) at their AGM in May of their commitment to divest.<sup>79</sup>

DEA has a large number of physician members and so was able to support the genesis of this decision almost entirely from within the College. Very importantly, DEA was able to communicate and inform our own physician membership so they in turn advocated divestment to the RACP president and board members in a timely way. DEA also approached the college officially at an opportune moment, and after the decision express support and congratulations.

Health industry superannuation funds are another important target for fossil fuel divestment. After many individual DEA member letters and enquiries to First State Super over the last 2 years, DEA Victorian Chair Dr John Iser met officially with senior investment advisors. DEA has been informed that First State Super are developing fossil free investment options and are working towards divesting the fund from thermal coal as well.

In WA, DEA WA divestment co-ordinator Dr Richard Yin is developing a campaign to encourage GESB Superannuation to divest. This has involved DEA engagement with a variety of medical organisations and unions to garner support for a fossil fuel free option and thermal coal divestment within GESB. A website petition is in development in order to take the issue to the wider health GESB membership. The GESB campaign will continue to be a focus in the coming year, as well as an official DEA approach to HESTA.

SA member Dr Hubertus Jersmann spoke in Rundle Mall, Adelaide, on National Divestment Day and was supported by a number of DEA medical students. Student DEA members around Australia have been active in advocacy for University organisations and the Universities themselves to join the divestment movement.

DEA plans to continue supporting and promoting fossil fuel divestment as an important strategy to mitigate not only the health impacts of climate change, but also the direct health impacts of coal and gas.

## Forests and biodiversity



The Forests and Biodiversity Committee with Dr Dimity Williams as Convenor works to share our passion for nature by developing the best ways for DEA to highlight the interrelationship between our health and natural ecosystems.

We do this by writing in medical and other publications, creating resources on biodiversity and health for DEA members and presenting at conferences. We also actively collaborate with other organisations who seek to highlight the value of nature for wellbeing.

#### The Committee's work this year includes:

- Ongoing collaboration with the International Union for the Conservation of Nature in the development of Healthy Parks Healthy People guidelines. The draft document is in its final stages and aims to be a strategic document for those involved in promoting the wellbeing benefits of parks globally.
- Writing to all cross-bench Senators regarding the Federal Government's
  amendments to the RET which has been altered to include burning of forests
  as a form of renewable energy. DEA expressed our deep concern that this will
  not only contribute further to climate change by disrupting soils and releasing
  carbon into the atmosphere but will inevitably adversely impact biodiversity.
- Writing in various forums on nature and its importance for our healthspecifically the biodiversity of the Great Barrier Reef- thanks to Marion Carey for her contribution to Wild Magazine's article<sup>80</sup>
- Dimity Williams contributed to Wild Magazine by writing on nature time as beneficial for health in hard copy- edition 145 and 144 and online<sup>81</sup>
- Writing in GP Magazine, Medical Observer Dimity Williams outlined the health and developmental gains of nature time for children<sup>82</sup>
- Marion Carey and Kenneth Winkel collaborated to develop a presentation which Marion gave at the IUCN World Parks Congress in Sydney. The presentation provided an overview of the Great Barrier Reef's biodiversity and its value to health and was well received at this important world event.
- Dimity Williams presented on the wellbeing value of green space in schools at a conference of Victorian sustainability educators, "Curriculum Connections in a Changing World" June 23<sup>rd</sup>, 2015.

# iDEA15: A prescription for action

In March 2015, DEA took over the University of Western Sydney campus for iDEA15: A Prescription for Action. The annual, student-run conference was once again a huge success, bringing together over 200 doctors and students from around the country.

The overarching message of the conference was resoundingly clear: Climate change is no longer an issue of the future. We can already see, feel and measure the effects of climate change, both in Australia and globally. With this message in mind, the conference delegates spent three inspiring days acquiring fresh insights, new collaborations and bold ideas about how we as medical professionals can help lead the fight against climate change.







The program commenced with a pre-conference series of interactive workshops about climate change advocacy for GPs, which also attracted points for their training program. The official conference then began with an impressive list of eminent speakers, including AMA President Dr Brian Owler on video, speaking about climate change as "intergenerational theft" and Former Australian Defence Force Chief, Admiral Chris Barrie, on climate change as a serious security risk. We also heard from DEA member, Dr Richard Stiles, about medical activism, as well as The Climate Council's Amanda McKenzie and Professor Lesley Hughes.

The following day, the programme included Former Opposition Leader and leading economist Dr John Hewson speaking about his predictions for another GFC - Climate Induced? We also heard from Dr John Kingsley speaking about Indigenous Australians and Climate Change and Dr John Collee on Gaia: the planet as a person, and DEA member, Professor Colin Butler speaking about Limits to Growth.

We were fortunate to have a panel discussion around environmental politics in NSW, with speakers including the Environment Minister Hon. Rob Stokes, The Hon Linda Burney and Dr Mehreen Faruqi MLC. DEA members A/Prof Melissa Haswell and Dr Marion Carey talked about unconventional gas and Drs' Eugenie Kayak and Sallie Forrest on how to get more involved with DEA.

Another highlight of conference was the launch of a climate change campaign coordinated by AMSA medical students and DEA to encourage medical students and doctors to meet with Federal MPs and Senators to influence the emissions targets that Australia takes to the COP21 meeting in Paris later this year.

The conference saw the election of the 2015/16 Student Committee, with Sarah Cohn elected as National Student Representative, and Kate Wheldrake as the first ever National Student Representative Elect.



The conference attracted a great deal of media interest, confirming that DEA has a strong and important message to offer the wider community. The conference was reported by Nine news, Yahoo news, The Daily Mail, MSN and Perth Now<sup>84</sup>.

A huge thank you to iDEA15 convenor Todd Gregory, supported by Dr Helen Redmond and their magnificent iDEA15 team, whose hard work over many months made this event such a success.

Work immediately commenced to convene the 2016 student conference. University of Queensland student Beau Frigault, supported by DEA Management Committee member David King, are organising iDEA16 to be held in Brisbane, from April 16-17, 2016.

# Parliamentary visits and letters

Briefings on health facts to state and federal parliamentarians, Ministers and Shadow Ministers remain a key part of our activity. In person, we explain the health aspects of many of the issues described in this report.

We approach each visit strategically with a team of two or three members of DEA including a student member. This team is usually well received.

In 2014-2015, in a major initiative we visited nearly all Shadow and Outer Cabinet members in the months prior to the Labor Party Conference in July 2015 to explain the necessary changes in their policies to address the health consequences of climate change. At the end of 2014 we prepared an extensive submission to the Labor Party Platform which contained our view on revisions needed in the previous Platform in 2011. A briefing paper, a summary of our recommendations, was prepared and used in visits to nearly all members of the Shadow and outer Shadow cabinet. Some other members from coal or gas mining areas were also visited. The issues raised related to transition to renewable energy, fuel subsidies, air pollution, unconventional gas regulation and the impact of the export of coal on greenhouse emissions. This was a major task for DEA members around the nation. Responses from the meeting were collated and several issues continue to be discussed with some Labor members.

We have addressed Senate Committees and state inquiries in most states.

Letters to all Federal parliamentarians have continued the most recent being to explain the findings of the report on children and climate change<sup>85</sup>.

## **Educational activities**

#### One of the Objectives of DEA's Constitution is:

To alert doctors and the public on the health effects of environmental degradation locally and worldwide using the best available scientific evidence and the precautionary principle.

## Our educational role of DEA is paramount and is embodied in all our activities:

- addressing community groups,
- Grand Rounds in hospitals,
- delivering workshops on current issues
- briefing parliamentary representatives with the environmental and health facts.

The highlight of our educational program is the annual iDEA Conference which in 2015 was in Sydney and was an outstanding success. It reflects the part and indeed leadership the students display within the organisation with their contributions facilitated by their full membership status.

# Submissions made to parliamentary committees

#### Warkworth Continuation Project

www.dea.org.au/images/uploads/submissions/Warkworth Continuation Project Submission 08-14.pdf

#### Mount Thorley Continuation Project

www.dea.org.au/images/uploads/submissions/Mount Thorley Continuation Project Submission 08-14.pdf

#### Proposed variation to the Ambient Air Quality NEPM

www.dea.org.au/images/uploads/submissions/AAQ\_-\_NEPM\_Submission\_10-14.pdf

## Certain aspects of Queensland Government Administration related to Commonwealth Government Affairs

www.dea.org.au/images/uploads/submissions/Certain Aspects of QLD Government Administration Submission 11-14.pdf

#### Review of hydraulic fracturing (fracking) in Tasmania

www.dea.org.au/images/uploads/submissions/Review of Hydraulic Fracturing %28Fracking%29 in Tasmania 12-14.pdf

#### Inquiry into Unconventional Gas (fracking) – South Australia

www.dea.org.au/images/uploads/submissions/Inquiry into Unconventional Gas SA - 01-15.pdf

### Submission to the Climate Change Authority on the future emission targets - Australia

www.dea.org.au/images/uploads/submissions/Submission to the Targets and Progress Review 03-15.pdf

#### Setting Australia's post 2020 target for greenhouse gas emissions

www.dea.org.au/images/uploads/submissions/Setting Australia%E2%80%99s post-2020 target greenhouse gas submission 04-15.pdf

#### Working towards a National Clean Air Agreement discussion paper

www.dea.org.au/images/uploads/submissions/Submission to the National Clean Air Agreement 04 -15.pdf

#### Inquiry into the regulatory governance and economic impact of wind turbines

 $\underline{www.dea.org.au/images/uploads/submissions/Inquiry\ into\ Economic\ impact\ of\ wind\ turbines\ 04-\underline{15.pdf}$ 

#### Fin-Fish Aquaculture Industry in Tasmania

www.dea.org.au/images/uploads/submissions/Tasmanian Fin-Fish aquaculture industry submission 05-15.pdf

#### Inquiry into the Register of Environmental Organisations

www.dea.org.au/images/uploads/submissions/Register of Environmental Organisations submission 05-15.pdf

#### Warkworth and Mount Thorley Continuation Project Update

www.dea.org.au/images/uploads/submissions/Warkworth and Mt Thorley Continuation submission \_06-15.pdf

## Communications

Coverage provided by mainstream media of issues relating to damage to the environment is woeful on many occasions. Even climate change -- the most compelling issue of our day, and which will be discussed by world leaders at COP21 in December 2015 -- if not ignored, is presented through a false dichotomy of environment and economics, whilst its serious implications for human health often fail to rate a mention.

Yet for all the media's deficits, DEA keenly recognises that this medium plays a critical role in communicating issues in the public interest to influence the political agenda and bring about important change.

In seeking to reframe the conversation to include health messages, DEA has spoken up loud and clear about issues that are of significant public interest.

We have tackled: climate change, coal, coal seam gas, unconventional gas, divestment, solar thermal, air pollution, biodiversity, co-benefits and renewable energy targets, and we have also supported key reports from leading organisations such as the IPCC and the Lancet Commission.

Our opinion and commentary, respected for its firm focus on evidence-based science, has been published in many of the country's most important mastheads- the *Sydney Morning Herald*, the *Guardian, Canberra Times*, the *ABC*, including current affairs programs such as Life Matters. Furthermore our members have been sought out by journalists and have been featured in news, current affairs, as well as feature stories.

DEA has also been a newsmaker in its own right. We have had significant media for our report *No Time for Games: Children's Health and Climate Change* when it was launched in June 2015.

The report attracted News Corp mastheads such as the *Daily Telegraph* and the *Sunday Times*; the *ABC*, including a lengthy interview on 774 ABC Melbourne, and youth station *Triple J*; Australian Regional news and its various publications; Fairfax newspapers across the country, including the *Sydney Morning Herald*; *Guardian Australia* which ran an opinion piece; the *Medical Observer*, and many independent publications and blogs.

We have also sought to gain greater publicity for issues in local and regional media through the involvement of locally based passionate DEA members. This has proved to be a good strategy as local media is often hungry for content featuring people in their community. Our major limiting factor has been finding members in the areas of interest.



One of our greatest challenges continues to be the tabloid media which largely ignore issues such as climate change. For such publications, a picture opportunity can speak a thousand words. During the Melbourne Marathon fundraiser, Team DEA running in scrubs was featured in the *Herald Sun*. While it made for a fantastic picture, it also carried the message of doctors as community champions who care about health and the environment.

Another challenge has been fitting in with the media's notion of "newsworthiness"-usually referring to something new and easily digested. This doesn't suit the complex nature of DEA's work, and our strategy has been to respond to major issues through

opinion pieces or comment that permit a measured response using science and analysis. David Shearman's, *Mandatory federal guidelines needed on fracking, coal mining*<sup>86</sup> in the *Sydney Morning Herald* is one example.

#### Medical media

In addition to our focus on mainstream media, we have continued to raise awareness about our work among the medical profession. We have contributed regular opinion pieces in the *Medical Observer* (see page 41) and have been featured in several other publications, including The *Medical Journal of Australia (MJA)*, *Australian Anaesthetist* and *Surgical News*.

#### Conclusion

Perhaps the best way of measuring DEA's growing public profile in the media is not only whether we have 'made it' into the newspaper or on the radio and television, but whether we can influence public life. In short, have we made a difference?

We believe that we have, for example during the South Australian parliamentary inquiry into fracking in November 2014 our media release resulted in David Shearman's and John Willoughby's names being referred to in Hansard, while Greens Member of the LC, Mark Parnell, quoted from it when speaking about health impacts.

This highlights that our voice in raising awareness of the inextricable link between health and the environment and why these matter has been heard.

# Media releases

Doctors welcome vote to establish a SA fracking inquiry, 18 November 2014 South Australian doctors welcome Wednesday's (19 November) Legislative Council vote to establish a Parliamentary Inquiry into fracking.

www.dea.org.au/news/article/doctors-welcome-vote-to-establish-a-sa-fracking-inquiry

## Doctors back call for Royal Commission into the effects of CSG on health, 23 February 2015

Leading health advocacy organisation, Doctors for the Environment Australia, has today backed calls to establish a Royal Commission into the impact of coal seam gas mining on the people of Oueensland.

 $\underline{www.dea.org.au/news/article/media-release-doctors-back-call-for-royal-commission-into-the-effects-of-cs}$ 

#### Meet the new climate change warrior: your doctor, 12 March 2015

President of the Australian Medical Association Dr Brian Owler said climate change would have "significant consequences" for our health and that there was a clear role for doctors to become involved in tackling the issue, describing any failure to do so as "inter-generational theft". www.dea.org.au/news/article/meet-the-new-climate-change-warrior-your-doctor

### Politicians' rush for profits puts Queenslanders at serious risk of illness, 30 March 2015

Last Friday's report into the former Queensland government not only exposes the inadequate regulation and approval processes for coal seam gas and coal mining in Queensland, but also the failure of the state's leaders to put the health of their constituencies first, according to a leading medical group.

www.dea.org.au/news/article/media-release-politicians-rush-for-profits-puts-queenslanders-at-serious-ri

#### Australia's emissions targets fail to protect health, 24 April 2015

Doctors blast the Abbott government's failure to put health first in its emissions targets- despite health being the biggest threat we face this century.

www.dea.org.au/news/article/dea-submission-australias-emissions-targets-fail-to-protect-health

### Doctors' Group applauds the AMA's endorsement of the Australian Academy of Science report on climate change and health, 30 April 2015

Doctors for the Environment Australia says the AMA's backing of this important report indicates the nation's leading doctors' organisation is using its position to encourage strong action to protect the Australian public from the health harms of climate change.

www.dea.org.au/news/article/media-release-dea-applauds-the-amas-endorsement-of-the-australian-academy-o

#### Power station closure a step forward for health, 12 May 2015

The announcement of the closure of the Alcoa coal mine and coal fired power station on August 31st 2015 is a step forward for health, say Doctors for the Environment Australia.

www.dea.org.au/news/article/media-release-power-station-closure-a-step-forward-for-health

DEA's Children's Health and Climate Change report to be launched, 30 May 2015 Australian epidemiologist and former Australian of the Year, Professor Fiona Stanley to launch report on Children's health and climate change in Perth on Sunday 31 May, 9.30am www.dea.org.au/news/article/media-alert-deas-childrens-health-and-climate-change-report-to-belaunched

DEA welcomes RACP's announcement to divest from fossil fuels, 5 June 2015 Doctors for the Environment Australia welcomes the Royal Australasian College of Physicians (RACP) announcement this week that it will divest investments in companies involved in fossil fuel activities from its \$90 million investment portfolio.

www.dea.org.au/news/article/dea-welcomes-racps-announcement-to-divest-from-fossil-fuels

Doctors welcome the closure of Port August Coal plant, 12 June 2015

Doctors for the Environment Australia (DEA) welcomes the announcement by Alinta to finally cease its brown coal burning industries in Port Augusta by 2018.

www.dea.org.au/news/article/media-release-doctors-welcome-the-closure-of-the-port-augusta-coal-plant

DEA welcomes Lancet report which says climate change is the biggest health opportunity of the 21<sup>st</sup> century, 23 June 2015

The government needs to immediately address the issue of climate change to protect health, urge leading doctors in their strongest message yet.

 $\underline{www.dea.org.au/news/article/dea-welcomes-lancet-report-which-says-climate-change-is-the-biggest-health}$ 

Healthy planet, healthy people

# Medical Observer and DEA collaboration

DEA has continued to benefit enormously from its ongoing collaboration with the *Medical Observer*, a highly reputable publication for general practitioners with over 40,000 registered users nationally.

General Practitioners are the backbone of the public health system. The collaboration has enabled DEA to communicate topical and important environmental issues, such as climate change and air pollution, that affect the health of patients.

Furthermore our regular contributions have provided our organisation with the opportunity to raise DEA's profile among our medical colleagues.

The DEA opinion pieces which were published from July 2014 to June 2015 are:

- Global climate changes need action
   An overview of national and international action to tackle climate change; divestment as a powerful strategy doctors can support at a personal and institutional level; and doctors have a duty of care to humanity to do all in their power to tackle the health threat of climate change.
   Dr Helen Redmond, 15 July 2014
   http://dea.org.au/news/article/global-climate-changes-need-action
- Ditch the screen for the green
  A sedentary lifestyle with kids today spending much of their time in front of

screens has reduced nature-based activities providing children with opportunities for independent adventure, risk-taking and exploration. The author urges GPs to advocate for children to have greener school grounds, regular nature-based activities at school and improved urban design so they can readily play in a nearby natural place and walk or cycle to school.

Dr Dimity Williams, 26 August 2014

http://www.medicalobserver.com.au/professional-news/ditch-the-screen-for-the-green

Save our planet to save ourselves

Human activities from ongoing land clearing, deforestation and agriculture, pollution, and nitrogen cycle disruption, to ocean acidification and climate change are chiefly responsible for biodiversity loss.

This has far-reaching potential effects upon our health, economy and, ultimately, our survival. Doctors must demand an end to indiscriminate logging and the industrialisation of wilderness and marine sanctuaries, as well as act on climate change.

Dr George Crisp, 7 October 2014

http://www.medicalobserver.com.au/professional-news/save-our-planet-to-save-ourselves

Climate change's silver lining is better health
350 Pacific, an organisation promoting Pacific youth to take leadership on
climate change, organised representatives from 12 Pacific islands to share their
stories in Australia to provide insight into the human face of climate change. The
author argues climate change can be a key driver for shaping a sustainable,
thriving society founded on clean energy, compassion and respect for the

Grace Davies (National Student Representative – 2014-15), 25 November 2014 <a href="http://www.medicalobserver.com.au/medical-news/climate-change-s-silver-lining-is-better-health">http://www.medicalobserver.com.au/medical-news/climate-change-s-silver-lining-is-better-health</a>

• Docs need to take a stand on climate

environment.

A personal reflection on the Black Saturday bushfires, and the need for action on preparing and tackling climate change to protect the most vulnerable in our community — the elderly, the poor and the marginalised.

Dr Sally McIlroy, 27 January 2015

http://www.medicalobserver.com.au/professional-news/docs-need-to-take-a-stand-on-climate

Poor health link to poor air quality

A growing and under-recognised cause of cardiorespiratory exacerbations is air pollution, especially particulate matter. If we continue with business as usual, with a rising number of road vehicles and continued mining activity, particulate matter levels will inexorably rise, along with health consequences. Consideration must be given to reducing the sources of particulate matter —

through small-scale individual actions and medical profession advocacy on reducing sources of air pollution.

Dr Malcolm Forbes, 29 April 2015

http://dea.org.au/news/article/medical-observer-poor-health-link-to-poor-air-quality

Doctors should lead on population

Sometimes "less is more", for both human health and the health of the planet. It's estimated there will be 9.6 billion people in 2050 and 10.9 billion by 2100. Feeding an extra three billion will be challenging, particularly in association with climate change and rising sea levels. Doctors have the potential to lead on this complex issue. We have the authority to bring this issue to mainstream attention and encourage broad scientific inquiry. We can deliver the practicalities of contraception programs and assist economic development through improved public health.

Dr David King, 16 June 2015

http://dea.org.au/news/article/medical-observer-oped-doctors-should-lead-on-population

All DEA opinion pieces have been printed with DEA acknowledged as either the author's affiliation, or the source of the article, together with our web address. DEA does not accept any payment for opinion pieces written for or in affiliation with Medical Observer.

# Student members in action

DEA student members have continued to play a key role in DEA's success and achievements. The students have been very active over the past year, bringing an energy and enthusiasm to the organisation and ensuring that DEA has a presence within medical schools across the country. The National Student Committee has held regular monthly Skype meetings throughout the year, co-ordinating national and state-based activities and events to promote the organisation, lobby politicians and facilitate education around health and the environment.

#### **National** events

Code Green week was once again a highlight of the DEA Student calendar in collaboration with the Australian Medical Students' Association. All states took part in a week of action, which included tree plantings, bake sale fundraisers, trivia nights, film screenings, workshops and lectures.

Another highlight was student members Grace Davies (VIC) and Alice McGushin (TAS) presenting a keynote speech at the H20 International Health Summit in Melbourne in November, run by the World Medical Association and the AMA. The talk, entitled 'Our Planet Our Future – Students Leading Community Action' outlined the actions of Australian medical students to combat climate change, and what is required from the medical profession to address the issue. The activities of DEA and AMSA students were met with great enthusiasm and encouragement internationally at the conference.

We also had a strong presence at the AMSA Global Health Conference in Sydney this year. Student member Alice McGushin gave a presentation at AMSA Global Health Council prior to the Global Health Conference. VIC DEA member, Professor Grant Blashki also spoke about climate change and health at the conference and played a video that Alice McGushin made in Taiwan at the International Federation of Medical Students Conference.

DEA students also co-ordinated an 'Explorer Stall' at the Global Health Conference, which was a great success. Around 120 students put their names down to find out more about DEA. The stall involved a globe that outlined some of the impacts of climate change faced by each region, a wheel of action on climate change, and a bicycle-powered Smoothie-making machine.

There were numerous DEA student publications throughout the year. SA Student member Carmen Hayward wrote an article about divestment as a health issue in the Aphra Magazine and an article about individual actions to address climate change in the Student BMJ (British Medical Journal). Student member Ebony Liu (SA) wrote a letter to the editor about climate change, which was published in the Australian Chinese Medical Association newsletter. Previous National Student Representative Grace Davies had a letter to the editor published in The Age regarding the carbon tax, as well as a generic letter to one's bank regarding the reasons for divestment from a health perspective, which was published by 350.org for other health professionals to use.

# Additionally there were many state-based activities held throughout the year.

In Victoria, this included a stall and numerous workshops that were run by DEA students at the Global Ideas Forums in Melbourne. A Divestment Training evening organised in collaboration with 350.org, a road trip to Hepburn Wind Farm for a tour of the wind turbines, and a successful Victorian Pub Night.

New South Wales DEA Students held a Divestment Training event and took part in a 'Cuppa Sunshine' event as part of the Solar Citizens campaign to protect rooftop solar. A couple of students also represented DEA at the Students of Sustainability Conference held at Australian National University (ANU) in Canberra.

The first DEA student meeting in Western Australia was attended by Dr Sallie Forrest (DEA Policy and Advocacy Officer) and Nick Watts (WA medical student, working for the World Health Organization and The Lancet Climate Change and Health). DEA students also helped co-ordinate a fundraising effort in WA targeting philanthropists, holding a carbon offset party and clothes-swap events.

In Queensland, a number of DEA students presented at forums held by Clean Air Queensland on the health effects of coal dust on the respiratory system. Dr David King (DEA Management Committee) also presented a lecture within the 2<sup>nd</sup> year medical curriculum on environmental determinants of health. This lecture inspired a

number of students to enquire about any research opportunities in the field, and a student member enquired about putting environmental health ethics into the curriculum. Student DEA members in Queensland attended the 'Spirit of Healthy Horizons' Conference, held a booth at the Australian Climate Action Summit and attended the Climate March in Brisbane.



Highlights in South Australia included incorporating a climate change lecture into the 2<sup>nd</sup> year medical curriculum at the University of Adelaide. Flinders University held an informative and engaging lunchtime event with guest speakers Prof. Michael Kidd (prior DEA Chair) and DEA member Dr Ingo Weber. They hired a Smoothie bike, sold DEA KeepCups and hand-printed a DEA banner. SA students also collaborated with 350.org to promote a DEA divestment workshop and film night.

#### Post-iDEA15 decisions and restructuring

Following the successful iDEA15 conference, a number of changes were made to the structure of the National Student Committee. A few positions were removed from the Committee, while the iDEA Convenor was added as an official member on the National Committee.

The committee also formulated a 2-year vision for 2015-2016.

To strengthen DEA's presence at each university in Australia, creating a structured state student committee for each state, with a process to ensure its continuity from year to year.

To use these state committees to increase our student numbers and ensure that all members are given opportunities to engage with DEA to increase their knowledge and skills, and are kept informed of its activities.

To gradually increase the number of nationally coordinated events and activities as the state committees strengthen in terms of size and structure.

Since iDEA15, DEA has also made the decision to separate from the Code Green collaboration with the Australian Medical Students' Association. Both DEA and AMSA students have continued to grow independently, and are both leading the fight against climate change in the medical student community. To further enable each organisation to be as effective as possible, it was decided that it would be best for the official Code Green collaboration to end. However, it is hoped that there will be many more joint initiatives between AMSA and DEA in years to come.

# Our People

As for all organisations, our value lies in the calibre and contributions of our members. Having only one paid full time medical staff member, our newly created Public Health Trainee position, the output of DEA otherwise depends upon voluntary work of our many members. Some of these members are portfolio holders, such as our Board (National Management Committee); State committees; other special interest sub-committees etc.

# Many of our "ordinary" members undertake "extraordinary" activities on behalf of DEA.



Visiting or communicating with Members of Parliament

Attending our annual iDEA conference

Taking on a local issue, such as Unconventional Gas Development

Organising educational meetings eg. Grand Rounds

Making donations of time, money or expertise

Writing or reviewing formal submissions

Writing letters to the Editor, newsletter contribution

Speaking at medical and/or public events

Engaging with our social media platforms including Facebook and Twitter

Becoming an advocate for greening their clinic or health service

Organising and attending social events and networking opportunities

Taking the opportunity to educate themselves about relevant issues

Our leaders spend countless hours researching, prioritising requests, ensuring good governance, and writing policy. Committees mostly communicate by email and teleconference, but occasionally gather in the same location, such as meetings in conjunction with the Annual General Meeting.



Our students are extremely valuable in their enthusiasm and contributions throughout the year, learning as they go and building camaraderie. The fact that the annual conference is student led and of professional standard is testament to this.

To support all this activity, the Membership and Development Committee has been established, with the aims of growing membership numbers, improving brand recognition and providing further opportunity for members to engage. Our inaugural Supporters' Event was held in March in conjunction with iDEA15 to recognise and celebrate the contributions of key contributors to DEA.

Membership numbers increase from year to year. One of the most powerful ways to recruit new supporters is for members to have personal conversations with colleagues and friends, extending an invitation to join DEA. Significant events, such as the launch of the *Children's Health and Climate Change* Report, generate media exposure which is another avenue to increasing our supporter base.

Our paid support staff go beyond the call of duty, working behind the scenes to keep DEA on track. Dr Sallie Forrest, our inaugural Public Health Registrar, has been busy supporting the work of DEA, particularly in assisting our Honorary Secretary David Shearman, alongside her research and training requirements.

#### Healthy planet, healthy people

#### Management Committee 2014-2015

The following committee members were elected on or after October 20, 2014

Professor Kingsley Faulkner – Chair

Professor David Shearman – Secretary

Dr Hakan Yaman – Treasurer

Dr Rohan Church (TAS)

Dr George Crisp (WA)

Sarah Cohn – Student Representative

Dr Malcolm Forbes (QLD)

Dr Rob Hall (SA)

Dr Eugenie Kayak (VIC)

Dr David King (QLD)

Dr Helen Redmond (NSW)

#### Corresponding members:

Dr Kristen Pearson (VIC)

Dr Tim Senior (NSW)

Kate Wheldrake – Student Representative Elect

#### Ex-officio:

Sallie Forrest – Policy and Advocacy Officer

Carmela Ferraro – Media and Communications Officer

Joy Oddy – Administration Officer

#### Scientific Advisory Committee 2014-2015

We are fortunate to have the support of a Scientific Advisory Committee consisting of eminent doctors and scientists and we thank them for their advice and contributions throughout the year.

The members of this committee are:

Professor Stephen Boyden AM Professor Peter Doherty AC Professor Bob Douglas AO Professor David Griggs

Professor Michael Kidd AM Professor David de Kretser AC

Professor Stephen Leeder AO Professor Ian Lowe AO Professor Robyn McDermott Professor Peter Newman

Professor Emeritus Sir Gustav Nossal AC

Professor Hugh Possingham Professor Lawrie Powell AC Dr Rosemary Stanton OAM Professor Fiona Stanley AC

Professor David Yencken AO Dr Norman Swan



# Summary of the Treasurer's Report

I am pleased to report that the financial position of DEA has further improved, with our monetary equity increasing by \$21,102 this financial year despite our increased expenditure. This has allowed the funding of a number of key activities to support the work of our largely volunteer base. This work has been outlined elsewhere in the annual report.

The increase in revenue has been funded by both an expansion of our membership base of approximately 10% as well as the generosity of our members and supporters. For this we are indebted and thank you.

The environmental challenges for the next year are pressing. Your continued membership is very important to help us collectively to address them. Additionally we are acutely aware of the time pressures that our members face. So please be assured that if your commitment to DEA is unable to extend beyond maintaining your membership this will be a very valuable contribution.

I also wish to thank our accountant Cameron Batterham from Batterham & Associates for generously donating his time to independently prepare and audit the DEA Annual Financial Statement. This report will be uploaded as a public document and will be viewable at the Australian Charities and Not for Profit Commission website <a href="http://www.acnc.gov.au/">http://www.acnc.gov.au/</a>.

Hakan Yaman, Honorary Treasurer

#### Healthy fundraising

This year DEA members were joined by their friends, family and colleagues in funruns to promote our message "Healthy planet, healthy people".







While 'fun runs' seem like an oxymoron to some, our runners had a great time training together and making it over the finish line.

Team DEA in the Melbourne Marathon Festival had 76 runners who made a striking group appearance at the MCG. DEA's logo could be seen on the course in all distances, 3km through to the full marathon. The team did a fantastic job fundraising for DEA with over \$25,000 raised to fund the work we do. Team organiser and DEA student member Laura Beaton

"I am so proud of all our runners' efforts, on the track and online fundraising. This event is a great way to start talking to people about the environment and health".



The team had excellent support from Carmela Ferraro, DEA's Media and Communications Officer and we were profiled in VicDoc, Medical Observer, Australian Anaesthetist, Runner's World and the Herald Sun. Team DEA spirit remains high as we train for the next festival.

Perth DEA runners also entered "Run for a Reason" on May 24<sup>th</sup>. DEA members were joined by their non-medical friends and family both on the track and for team support. The team of 15 raised over \$3,000 for DEA and received press coverage in the local papers. Organised by DEA GP member Louise Sparrow, the team were great ambassadors for our organisation.

Organised by DEA volunteer members, these active community events have proven to be wonderful fundraising as well as "friend-raising" activities for DEA. Keep an eye out for a local event you think a DEA team could enter. Contact the Membership and Development Committee to help.

#### Healthy planet, healthy people

# Thank you

DEA thanks everyone who has supported the work of our organisation financially this year. We remind you that tax deductible donations can be made, a single or regular contribution via our website <a href="https://www.dea.org.au/donate">www.dea.org.au/donate</a>.

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