2016 - 2017

Annual Report





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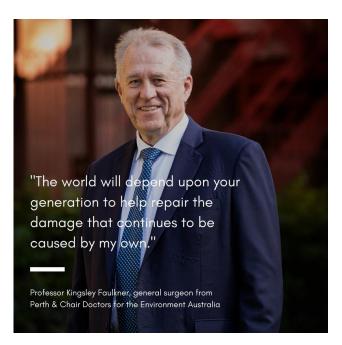
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## Chair's Report

This Annual Report gives an outline of the many issues and activities that members of DEA have contributed towards during the year.

The Management Committee is grateful for their well-informed understanding of the multiple environmental challenges to health, their determination to educate and to motivate others, and to make real differences at this precarious stage in the history of our country and of the world.

Members of DEA have been busy engaging with other members of the medical and health professions, speaking to community groups, to politicians and to other policy makers as well as to a wide group of friends and families.



Submissions remain a vital part of DEA's activities. They help frame our policies and we should never underestimate the impact that they have on the public record. They have been important in the VCAT inquiry and determination, the challenge to the Acland open cut mine extension proposal in Queensland and in the decision to close the Port Augusta coal-fired power plants and transition toward much cleaner renewable energy technologies. Multiple submissions have been written and presented during the year and we are grateful for the many contributors. Educational DEA Fact Sheets published during the year have benefited from the research underpinning these submissions.

Climate change remains the overarching challenge to health but there are many other related environmental issues. DEA members have been active on issues that include air pollution, aging coal-fired power stations, proposals to open new coal mines, unconventional gas exploration and extraction, water availability and contamination.

Considerable activity seeking to persuade various health and superannuation funds, banks, universities and other organisations to divest from fossil fuels has been led by DEA members. The commercial sector is becoming more aware of the governance risks and reputational damage of doing too little to urgently confront the reasons for climate change and the costs associated with its effects.

Australia's average temperature continues to break records and the predicted consequences are extremely serious. DEA members have addressed the health consequences of extreme heat and bushfires and droughts, the loss of biodiversity and natural ecosystems, deforestation and the health of rivers. They are involved in greening healthcare and establishing hospital based sustainability committees. Through collaborations, DEA members



have become involved in understanding the advances in renewable energy technologies and their increasingly persuasive economic credentials.

Other collaborations have included organising and conducting health, energy and climate change symposiums in the lead up to the Western Australian state elections in March and, more recently, the combined initiative by the City of Adelaide to become the world's first carbon neutral city.

Collaborations with other organisations sharing similar goals occur to mutual advantage, but DEA wishes to respectfully retain its well-established identity and carefully considered policy positions during any combined initiative or event.

The iDEA17 Conference held in Melbourne in April was another outstanding success. There were many motivating speakers, often bringing up to date scientific evidence and conducting effective workshops. National media attention was generated by the event.

DEA medical students' numbers have grown and they bring refreshing enthusiasm, intelligence, determination and many new ideas. Initiatives like the national photography competition have engaged many and inspired others.

Media activity through radio, television, print, and social media has been extensive throughout the year and we thank the many DEA members who have been involved.

The Management Committee would like to thank our small but dedicated hard working staff without whom most of DEA's achievements would not have been possible.

#### **Special fund-raising appeal**

At the meeting of the Management Committee in April, it was resolved to conduct a major appeal among members to raise sufficient funds to appoint an Executive Officer. The need to place the organisation on a firmer professional footing was recognised. The workload and need for careful management and support is very large for an essentially volunteer organisation and those demands have fallen upon the shoulders of too few.

The appeal has been very generously supported by DEA members and it has been boosted tremendously by the generosity of the Lord Mayor's Charitable Fund. DEA is indebted to the Fund and to Eugenie Kayak and John Iser for their involvement in negotiating the matter.

The success of the appeal has enabled DEA to advertise for an Executive Officer and to offer the successful applicant a two-year position in the first instance.

Professor Kingsley Faulkner AM

Kingsley Faultine

August 2017



## Climate change



"Climate change is the biggest global health threat of the 21<sup>st</sup> century"

We now recognise that climate change is affecting every aspect of our national life and, within our remit of health, we realise that health services will become eroded as the cost of extreme weather events eats into state and national spending. In our view, the federal parliament's response to the urgent need for action has been desultory and ineffective.

It is against this background that DEA has attempted to respond to events by using medical and climate change science to educate the community and elected representatives on policy needs and action.

We are involved in many aspects of climate change; this section reports specifically on mitigation and adaptation.

We have consistently endeavoured to maintain a flow of published articles on all aspects of climate change from all sections of our membership, e.g. junior doctors Alice McGushin Calling on clinicians to take up the climate challenge<sup>2</sup> and Asiel Adan Sanchez Vital Signs: Health in the era of climate change<sup>3</sup>; and senior doctors Kris Barnden Shortsighted Budget 2017 ignores health impacts of climate change<sup>4</sup>, Marion Carey We need to do more to understand the impact of climate change on our health<sup>5</sup> and Peter Schrader Australian climate change policy isn't working<sup>6</sup>.

The Paris Agreement was an important landmark in climate change action. In our submission to the federal government for the *Inquiry into The Paris Agreement 2015 (Treaty)* <sup>7</sup> DEA identified Australia's emission reduction targets as inadequate to fulfil the basic requirement of the Agreement (limitation of average global temperature increase) because of failures in energy policy. We recommended that Australia embark on an ambitious program of policy reforms so that it can ratify and effect the Paris Agreement.

DEA made a submission to the federal government's *Review of Climate Change Policies*<sup>8</sup> and recommended strong Emission Reduction Targets of 40% on 2000 levels by 2025, 50% by 2035 and 95% reduction (or net-zero emissions) by 2050. We advised that for these levels to be achievable and affordable, there needed to be a price on carbon which is paid for by the big polluters. Dependence on coal and other fossil-fuels should be reduced as quickly as possible. No new coal-mines can be developed. Land clearing must cease.



The degree of urgency for mitigation requires that both Emission Reduction Targets and Renewable Energy Targets are ambitious and that the federal government works with the progressive states to achieve meaningful outcomes. Electrification of both private and public transport should be pursued vigorously to reduce both emissions and pollution. Government needs to include the adverse effects on health in all climate considerations.

DEA also made a submission in response to the issues paper *Action on the land: reducing emissions, conserving natural capital and improving farm profitability (Climate Change Authority)* in which we emphasised that priority must be given to reduction of emissions in land management practices.<sup>9</sup>

We made the point that a 'health in all policies' approach should be adopted for this review. This would ensure that recognition and priority be given to human health implications of agricultural greenhouse emissions, land degradation and biodiversity loss due to agricultural practices. There are specific land management practices which have human health implications that deserve recognition. Soil biodiversity, land clearance practices and growing products which improve human nutrition and health require action.

Much of DEA's activity in 2016-17 focussed attention on national budgetary actions which are counterproductive to emissions reduction. For example, DEA made a submission on proposed cuts to ARENA in a submission to the Senate Standing Committees on Economics and we expressed concerns in the media. 10,11

Recognising that much of emission reduction has become a remit of the states, DEA made a submission to the Queensland Government on *Advancing Climate Action in Queensland: Making the transition to a low carbon future.*<sup>12</sup>

Climate change adaptation has been poorly addressed by the federal government. A DEA discussion paper and policy on climate change adaptation was developed during 2016 and approved in February 2017.<sup>13,14</sup> We recommended that the Prime Minister's department, through the Federal Department of Health, provide guidance and leadership for a national response to the human health impacts of climate change. This would guide strategies which can be delivered in each state and territory, facilitated by a national expert task force.

#### Key points expressed in the discussion paper:

"Within the Australian constitution various responsibilities are shared between the Commonwealth, states and territories. Matters of prime national importance are the prerogative of the Commonwealth, and defence and immigration fall into this category. Within Australia, major financial decisions are made centrally by the Reserve Bank of Australia, which reports to federal parliament.

The provision of health to the Australian community is shared between state and federal jurisdictions. The delivery of services has become the responsibility of states and territories, but the Commonwealth involves itself in initiatives that need a national approach or coordination. These include, for example, ensuring compliance with World Health Organization International Health Regulations, and responding to pandemics and health emergencies.

..... However, despite action in some states, Australia lacks a co-ordinated national approach to climate change adaptation, with no specific leadership, governance or funding at the federal level".



During 2016-17, DEA joined the Climate Action Network Australia (CANA) to create opportunities for increased collaboration and communication with groups working on similar issues. CANA has over 70 member organisations from sectors including environmental NGOs, unions and faith groups, all committed to action on climate change.

Since joining CANA, DEA has been able to work more closely with researchers in Environmental Justice Australia and the Nature Conservation Council on air pollution issues, including arranging a joint visit with the NSW Minister for the Environment, Gabrielle Upton to brief her on the health and environmental concerns of coal-fired power stations and air pollution.

#### **Association with AMA**



AMA President Dr Michael Gannon meets with DEA Chair Professor Kingsley Faulkner

At the iDEA17 Conference in Melbourne in early April, media interest was generated in response to comments made a few days earlier by the President of the federal Australian Medical Association (AMA) regarding the closure of the Hazelwood coal-fired power station and the electricity blackouts in South Australia.

After some robust exchanges of views, there was a determination by both DEA and the AMA to overcome barriers to understanding, to build effective bridges for continuing discussions and to adopt constructive measures to address the multiple urgent health consequences of climate change and related environmental hazards to health. Relationships are being nurtured at federal and state levels.

DEA accepts that the AMA has a large membership with a range of views regarding public health issues like climate change and that it also has many other challenges to deal with on behalf of its membership and the health of the Australian community.

The relationship of the medical profession with governments will always be tinged with tension but the AMA is a proponent of improvement in public health. For example, the AMA was fully involved in advocating tobacco control measures, using its influence to support strong effective legislative measures with great benefits to health.

In preparation for submissions to a recent parliamentary inquiry on Infrastructure and Climate Change, DEA was consulted by the AMA, and DEA quoted AMA policies in its own independent submission. DEA will continue to offer its expertise and its commitment to future mutually beneficial initiatives in the wider public interest.



# Fossil fuels, air pollution & transition to renewable energy

#### Coal and health

Our endeavours to expose the health effects of coal mining and combustion continue to be our main educational activity, informing both communities and elected representatives. To do this effectively we continue to present medical evidence of the health costs of coal<sup>15</sup> and related poor ambient air quality in many regions of Australia.

Major outcomes were the closure of the Port Augusta power stations in South Australia and prevention of the expansion of the New Acland coal mine in Queensland after health concerns were expressed by DEA.

#### **Port Augusta**



Screenshot of the demolition of Playford A Power Station chimney on 9 September 2016 in Port Augusta
Source: Flinders Power

DEA worked for five years to inform the citizens of Port Augusta about the health effects of their power stations (such as increases in cancer of the lung and childhood asthma) and to support community aspiration for the development of renewable energy sources to replace employment in the power stations. The remaining power station was closed in 2016, five years after DEA and Beyond Zero Emissions (BZE) gave our initial community presentation on health effects and on the potential for replacement solar thermal technology.

In a submission to the Senate on the retirement of coal-fired power stations,<sup>17</sup> DEA deplored the lack of planning for closures which need to take place over the next decade, in order for Australia to fulfil its obligations under the Paris Agreement. In Appendix A of this submission and in an article in The Conversation,<sup>18</sup> we provided a detailed account of the methodology used to bring about the Port Augusta closure, which was successful because of planning and support of the entire town, medical and business organisations and the local elected representatives. The success was due not least to DEA's prosecution of health impacts though parliamentary committees and meetings with state and federal politicians.



The year encompassed much additional Port Augusta power station action from DEA in response to misguided calls by politicians to reopen after the South Australian blackout, at a time when the chimney stacks had been demolished and there was a further pollution episode from blowing of fly ash.<sup>19</sup>

#### **New Acland coal mine expansion**

In May 2017 the Land Court of Queensland<sup>20</sup> stopped a \$900 million expansion of the Acland coal mine, a decision in favour of landholders neighbouring the mine. When the judgement was published, we learned that this decision was based on the social and health impacts, the inadequacy of proponent's preventative measures for pollution as well as inadequate regulation by the state government. In our view, the judge made a ground-breaking statement by citing the failure to consider intergenerational equity over the use of ground water.

DEA had highlighted these harms in 2012 in a joint submission with Economists at Large<sup>21</sup> to the Queensland Government on the terms of reference for the Environmental Impact Assessment (EIS). DEA wrote to, and met with federal and state ministers about air pollution, met with Minister Burke<sup>22</sup>, and several Queensland ministers, made a submission on the subsequent EIS,<sup>23</sup> and had our members give expert opinion in the court case.

On reflection, it was documentation of harms over several years and working with the local community which lead to this successful outcome.

#### **NSW - The Rocky Hill Mine expansion**

DEA continues to have an important role in health advocacy around coal mines in NSW. The health impacts continue to be felt in a number of areas of the state particularly in the Hunter Valley and the Lithgow area. Coal mines continue to get approval and the health of the population continues to suffer.

In a submission to the NSW government, DEA outlined its concerns regarding the health impacts of the open cut Rocky Hill coal mine within one kilometre of residences in Gloucester, along with other nearby villages Warkworth, Jerrys Plain, Bulga and Singleton,



DEA NSW members meet with concerned residents living near the Bulga coal mine in the Upper Hunter

which already suffered from poor air quality. DEA identified the health risks from air pollution and from blasting for these communities.<sup>24</sup>

Garry Lyford and John Van Der Kallen published an opinion piece on our health concerns for the proposed Rocky Hill mine near Gloucester<sup>25</sup> and we expressed concerns to the Premier in a Sydney Morning Herald article<sup>26</sup>. John Van Der Kallen spoke on the health risks of the Rocky Hill Mine at the *Sustainable Futures Convention* in Gloucester.<sup>27</sup>



DEA has an active role in the Hunter Valley and Lithgow area in collaboration with groups such as Environmental Justice Australia, Lock the Gate, Groundswell Gloucester and the Nature Conservation Council. We have had community meetings to discuss the impacts of coal-fired power stations and to gauge the community's concerns.

#### **Hazelwood closure**

Hazelwood, Latrobe Valley's largest coal-fired power station and one of Australia's oldest and most polluting and carbon-intensive, finally closed in March 2017 after burning 730 million tonnes of brown coal over its 53 years of operation.

Over the past few years, DEA had been vocal in its opposition to Hazelwood through the media<sup>28</sup> and through submissions to the state<sup>29</sup> and federal<sup>30</sup> governments. However, the decision to close was made by its owner, French energy giant Engie, a decision based on looming maintenance and running costs, and a requirement by WorkSafe Victoria for the company to spend \$400 million on health and safety requirements. Notably, Engie has made a commitment to withdraw from coal-fired power generation globally.

Despite predictions of closure for many years, Hazelwood workers were given only six months warning of the final date. To allay concerns about social dislocation in the community, both federal and state governments promised cash grants, vocational retraining, counselling, and tax breaks for new enterprises. DEA had supported<sup>31</sup> these actions by government to help a community which has suffered from social upheaval and pollution over decades <sup>32</sup>.

About one-third of the work-force will be re-deployed to work on mine rehabilitation while over 100 were offered employment at other power stations in the Valley. DEA has outlined that mine-site rehabilitation<sup>33</sup> is essential in all cases of mine closure. This was illustrated by the 2014 event in which a disused section of the Hazelwood mine was the site of a major fire which burned for 45 days and affected thousands of local residents, causing both immediate and long-term health problems.

#### The Adani Carmichael coal mine

This mine is currently proposed on Wangan and Jagalingou country in central Queensland, and would be Australia's largest coal mine. The coal would be burnt in coal-fired power stations in India and produce 79 million tonnes of carbon dioxide equivalent per year – comparable to the annual emissions of medium sized countries such as Austria and Vietnam. Its impact was summarised by DEA in a video.<sup>34</sup> The mine would open the Galilee Basin to a potential nine additional mines.



DEA's Henness Wong presents on the health impacts of the Adani mine at a Guarding the Galilee screening and forum



Since 2011, DEA has made three submissions to the Queensland government on the health harms of this mine. No independent health impact assessment has resulted and we have questioned the competence of the Queensland regulatory system.<sup>35</sup> Apart from the health impacts of climate change there are significant concerns with water use, damage to the Great Barrier Reef and air pollution.<sup>36</sup>

The mine has been granted an unlimited groundwater license, to be drawn from the Great Artesian Basin, with likely lowering of water availability to existing users, as well as diverting 12,000 megalitres of water from local river systems in an already drought-prone area.

The health implications of the Adani mine development are detailed in DEA's Fact Sheets<sup>37,38</sup>.

In a letter to the Board of the Northern Australia Infrastructure Facility (NAIF)<sup>39</sup> DEA expressed concerns about the Board's ability to assess the health aspects of the project when it was considering a \$900 million loan to Adani. DEA wrote a submission<sup>40</sup> to the Senate inquiry on the governance of NAIF and many DEA members also wrote personal submissions.

#### **Air pollution**

DEA has had an increasing role in educating the community about air pollution from coalfired power stations and vehicles and in encouraging governments to improve air quality standards. This has been achieved with submissions, community meetings, a senate commission meeting, politician visits, articles<sup>41</sup> and radio interviews.<sup>42</sup>

We were shocked by medical reports of the recurrence of cases of coal workers' pneumoconiosis affecting mine workers in Queensland, indicating poor regulation and monitoring. The issue was reviewed in the Medical Journal of Australia (MJA) by Susan Miles, a DEA member and Respiratory Physician.<sup>43</sup>

The DEA Air Pollution Policy was revised and made available in December 2016.44

#### Air pollution from coal-fired power stations

In November 2016 DEA made a Submission to the Senate Committee into the retirement of coal-fired power stations.<sup>45</sup>

This analysed the severity of air pollution for each station and used this information to provide a priority list for closure. We recommended that:

- detailed planning for future community employment and development in relation to every coal-fired power station in Australia should be implemented now;
- renewable energy should be the preferred option to replace energy requirements; and
- air quality data monitoring in relation to all power stations should be subject to independent review, be transparent, immediately available and conducted by the state Environmental Protection Authority and not the operator.





DEA members John van der Kallen & Ben Ewald attended and spoke for DEA at the Senate hearing into the retirement of coal-fired power stations

DEA was invited to present at the Senate Inquiry and outlined the serious health impacts of burning coal and the need to close coal-fired power station as soon as possible.<sup>46</sup> Many radio and TV interviews were done at the time of the senate hearing.<sup>47</sup>

DEA proposed increasing the load-based licencing (LBL) fees to reflect the true cost of burning coal, and this was included in the final Senate Inquiry recommendations.

DEA subsequently made a submission to the New South Wales Government on LBL.<sup>48</sup> DEA's recommendations on LBL were added to the advocacy of other organisations such as Environmental Justice Australia and the Nature Conservation Council.

In conjunction with Environment Justice Australia, DEA was involved in meeting and educating communities about the health implications of coal-fired power stations at Muswellbrook and Wyee.

#### Air pollution from vehicles

DEA has also highlighted the ill health and deaths from vehicular air pollution. Vehicular energy contributes 17% of Australia's total greenhouse gas emissions and produces toxic pollution. DEA has made submissions to several inquiries urging for earlier adoption of the stricter fuel and engine standards that are already in place overseas.<sup>49</sup> The move from diesel with its high output of particulates, to hybrid and then all-electric vehicles is keenly anticipated,<sup>50</sup> but will be of advantage to health and the environmental only when recharging of vehicles is sourced from renewable energy.

#### Air pollution from shipping emissions in NSW

DEA has raised the issue of diesel emissions from shipping with the New South Wales Environmental Protection Authority because of the use of poor quality diesel fuel, which has a high sulphur content. This type of diesel is often burned close to residential areas. In Sydney, low sulphur fuels are used by passenger ships but this is not the case in other berths. DEA expressed concerns that the new terminal in Newcastle will increase air pollution and made representations to have shore-to-ship power installed. The member for Newcastle raised DEA concerns about this issue in state parliament.



#### Air quality initiatives with state Environmental Protection Authorities (EPA)

In New South Wales, DEA has developed a productive relationship with the EPA to improve issues related to environmental impacts on health. We have discussed load-based licencing, air pollution, coal-fired power stations, wood smoke and shipping emissions as well as the Williamtown PFOA/PFOS chemical contamination issue.

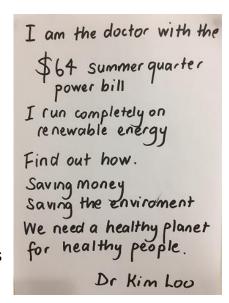
In January 2017, Victorian DEA members were invited to a briefing of the government's release of its response to the Independent Inquiry into the Victorian EPA, to which DEA had made a strong submission in 2015.<sup>51</sup> DEA were again invited to further discussions in February and reiterated the need for health considerations to be paramount.<sup>52</sup> Included in the government's response was the commitment of an extra \$45.5 million over the next 18 months to extend the EPA's reach, which, with its powers to prosecute breaches, will undoubtedly help to curb air-pollution. These changes were embodied in a Bill introduced to parliament early this year<sup>53</sup> but we await the planned release of a second Bill in 2018 for more specific details on air pollution control.

In South Australia, regular meetings with EPA staff have been organised with the intent of discussing their advice on approaches to improve national air quality.

#### Health, energy policy and renewable sources

The year 2016-17 was characterised by a continuing and egregious lack of a national energy policy critical for an urgent and orderly transition from fossil fuels to renewable energy sources. Nevertheless, significant progress towards increased investment in renewable sources by private and state players occurred across the majority of states.

DEA keenly followed and responded in detail to the release of both the preliminary (December 2016) and final *Blueprint for the Future* (June 2017) reports of the Independent Review into the Future Security of the National Electricity Market, known as the 'Finkel Report'. DEA made a wide-ranging submission, focussing on health and renewable energy, to this review in February<sup>54</sup> and to the Climate Change Authority in May 2017<sup>55</sup>.



Poster in Dr Kim Loo's waiting room

In our submission to the Finkel Report, we recommended that Australian governments adopt a 'health in all policies' approach for current future energy policies and actions, to ensure that deaths, illnesses and suffering from energy production from fossil fuels are taken into account and costed, so a balanced approach can be made in future policy. We also recommended that security of energy supply for hospitals and all medical services is ensured by developing local storage and back-up generation, in readiness for an increased severity of extreme weather events.



We pointed out that governments must develop energy policies which simultaneously address security, affordability and greenhouse gas emission mitigation; all can be accomplished with good management plans for the transition to clean energy sources.

Disappointingly, when Finkel reported in June 2017, the word 'health' was mentioned only once in the 124-page document.<sup>56</sup> The report supported a Clean Energy Target (CET) but, as DEA pointed out<sup>57</sup>, modelling used for this is spurious, lacking full cost accounting, including health costs, of all energy sources. Subsequently 49 of Finkel's 50 recommendations were accepted by the Coalition government but the establishment of a Clean Energy Target has remained in doubt.

Within this context of policy uncertainty, DEA has continued to recommend renewable energy as an essential ingredient to more rapid emission reduction. DEA submissions<sup>58,59</sup> in Victoria, Queensland and Tasmania promoted the importance of adopting renewable energy, emphasising the benefits for health<sup>60</sup>, the environment, and climate change mitigation.

An ongoing impediment to these aims is the skewed debate on energy mix, promulgated by fossil-fuel proponents and some media sources, which continued to blame renewable energy for the "black system" event of a total electrical blackout in South Australia. <sup>61</sup> AEMO's final report on the SA Black System was released in March 2017<sup>62</sup> and attributed the event to loss of 23 transmission lines in the cyclonic storm and to imperfect trip settings on some wind turbines.

#### **Unconventional gas and health**

A recently updated version of the *The Compendium of Scientific, Medical and Media Findings demonstrating Risks and Harms of Fracking*<sup>63</sup> by the Concerned Health Professionals of New York and Physicians for Social Responsibility demonstrates the rapidly increasing evidence on the risks of health harms from the unconventional gas industry. Accordingly, DEA has continued to provide submissions to state and federal government inquiries, outlining the body of research documenting ill health in inhabitants of gas fields.

DEA was part of the long campaign to stop unconventional gas development in Victoria<sup>64</sup> and, in November 2016, the Victorian government instituted a permanent ban.<sup>65</sup> The Victorian government also placed a moratorium on onshore conventional gas drilling until 2020.

But despite this encouraging news, development continued in other states, with the federal government calling for new gasfields to be developed to meet perceived domestic shortfalls. In fact, Australia's ample gas supply is being exported and sold at high prices, thereby increasing domestic prices.

In New South Wales, fracking continues, with Santos proposing a development of its Narrabri project to include more wells. DEA members managed to wade through the 7000-page Environmental Impact Statement to present a comprehensive submission to the government about the health aspects of the Narrabri Gas Project.<sup>66</sup>



In the Northern Territory DEA has expressed concern about unconventional gas development<sup>67</sup> and has provided submissions to the Inquiry into Hydraulic Fracturing of Unconventional Reservoirs Onshore within the NT 2016 (ToR) Oct-16<sup>68</sup> and Hydraulic Fracturing in the Northern Territory Apr-17.<sup>69</sup>

In South Australia, DEA continued to warn about gas development<sup>70</sup> and the final report of the SA parliamentary inquiry into fracking found that there was no social licence for the industry, with health a major concern from the SA community.<sup>71</sup> It remains to be seen what the SA government will do with the results of the inquiry's recommendations.

DEA in Western Australia has continued to provide medical expertise to a well organised campaign against fracking supported by the Conservation Council WA (CCWA). Along with CCWA, DEA were instrumental in bringing Professor Melissa Haswell as guest speaker in February to present at public meetings and to the AMA on the health risks of fracking.

The election of WA Labor has brought a state-wide moratorium on unconventional gas and fracking and immediate permanent ban for the South West, Peel and Perth regions. The government however remains under pressure from industry to end the moratorium and DEA will continue to present the accumulating evidence of the health risks.

#### **Divestment**

To reduce the health toll from fossil fuels DEA presents evidence to investors on the health implications of their investments in fossil fuel industries.

Divestment Day on 7-8<sup>th</sup> October 2016, organised by



Market Forces, saw many DEA members take part in an event designed to give the big four banks a clear message that investing in fossil fuels is definitely bad for your health.

DEA continued to support divestment campaigns including one aimed at health funds lead by Market Forces.<sup>72</sup> In May 2017 DEA wrote to all health funds regarding divestment. There were favourable responses from several and, in June, DEA met with the Chief Medical Officer of Medibank Private, Dr Linda Swan, in Sydney.

University campus divestment activities were notable in April 2017 when the *A Medical Student's Guide to Fossil Fuel Divestment* was published.<sup>73</sup> This was a collaboration between DEA and 350 Australia, and provided a valuable resource for medical students wishing to initiate and participate in campus divestment activities.



## Biodiversity and natural ecosystems

The first object in our Constitution is "To conserve and restore the natural environment because of its relationship to and impact on human health". The Biodiversity Committee, with Dimity Williams as convenor, delivers on this objective by producing articles<sup>74</sup> and other publications, creating resources on biodiversity and health for DEA members and presenting at conferences. We actively collaborate with other organisations who seek to highlight the value of nature for wellbeing.

At the Biodiversity and Health session at iDEA17 in Melbourne in April, Marion Carey gave an authoritative overview of the Great Barrier Reef, how it supports health and how vulnerable it is in the face of climate change and mining threats.<sup>75</sup> Committee member Ken Winkel spoke on the history of doctors as naturalists.<sup>76</sup>

DEA was the only health organisation to submit to the Victorian Government's review of the Yarra River<sup>77</sup> detailing the threats to the river from climate change and the importance of the river for the city to buffer impacts of climate change and other threats to biodiversity and water quality. DEA also outlined a risk of residual radioactive pollutants and other industrial contaminants affecting the river, a legacy from the 1940s when material from mines in Northern Territory and South Australia was processed in Melbourne, on the banks of her river. With the risk of flooding events associated with sea level rise and a planned expansion of Melbourne's port, concern about health impacts is certainly warranted.

Our committee wrote to the Victorian Premier asking him to halt logging in the Central Highland native forests to protect biodiversity and rich carbon sinks,<sup>78</sup> and also to obey current law, as state-owned VicForests has been logging in areas where endangered species have been found by local citizen scientists. Following our letter and submissions from other groups, logging was suspended and work is ongoing to further protect this area.

On 9<sup>th</sup> March, 2017 DEA partnered with Save Our Marine Life, an alliance of 25 conversation groups, to host a public screening in Melbourne of a film *The Last Sea Treasure* exploring the Coral Sea. Ocean explorer and film maker Valerie Taylor stars in this film and spoke at the event. Katherine Barraclough from DEA highlighted the incredible biodiversity of coral reefs and related ocean areas, and the critical role they play in human health and well-being, providing people with food, medicine, protection from storms and revenue from fishing and tourism.



DEA's Katherine Barraclough spoke at the screening of a new film exploring the Coral Sea, a biodiversity hot spot



This event was in response to the Australian Government's proposed cut backs to protection of marine sanctuaries, including that of the iconic Coral Sea which buffers the Great Barrier Reef and is one of the last remaining places on Earth where coral reefs and large populations of big fish such as marlin, deep-water sharks, whales and other ocean giants still thrive.

Ken Winkel attended a workshop on *Strengthening Parks in Victoria* on DEA's behalf in October 2016. Ken was an important public health voice in the discussion.

DEA participated in the *Nature is Good Medicine* workshop at the 15th World Congress on Public Health on 4<sup>th</sup> April 2017. This was the first in an informal series of workshops hosted by the Victorian Department of Health and Human Services related to health and nature; recently underpinned by a Victorian Memorandum for Health and Nature<sup>79</sup> and we were encouraged to see biodiversity mentioned in the context of health.

We also attended a *Health and Outdoor Learning Workshop* on 23<sup>rd</sup> May 2017 about learning in nature. A lead researcher from the UK spoke to senior members of the Health and Education Departments on the 'Natural Connections' program which ran over 4 years in England. Over 100 schools made the move to teach in green spaces, which facilitates learning and supports child development and behaviour.



DEA members in Brisbane participate in National Tree Day



## Greening healthcare

DEA accepts the responsibility to work at state and hospital levels to reduce the carbon and environmental footprint of our healthcare systems.

At DEA's conference, iDEA17, Forbes McGain and Eugenie Kayak ran a well-attended workshop *Improving a hospital's environment impact: what can a doctor do? A practical guide to achieving change*. Subsequently, Forbes McGain presented at an *Environmentally Sustainable Masterclass* at the May Australian and New Zealand College of Anaesthetists Annual Scientific Meeting in Brisbane, speaking on *ANZCA Research Grants - a comparison between the environmental effects of reusable versus single use anaesthetic equipment*.

A group of NSW DEA members helped instigate employment of a Sustainability Officer by the Sydney Children's Hospital Network (SCHN). Following initial meetings with the CEO, DEA members organised an 'open space' forum on 18<sup>th</sup> October 2016. This innovative forum was attended by staff from all levels of the hospital and was facilitated by Brendan McKeague. Summaries of the discussions and ideas generated by the forum were made into a book of proceedings, which has guided the work of the Sustainability Officer.



SCHN staff at the open space forum, 18th October, Sydney

In Tasmania a screening of *A Plastic Ocean*, organised by medical student societies IMPACT and Code Green, was the impetus for the formation of a group of Royal Hobart Hospital employees dedicated to minimising medical waste and improving sustainability. This group of DEA members, nurses, and allied health professionals has successfully lobbied for the establishment of a Sustainability Committee at the Hospital, which will ultimately extend to all sites of the Tasmanian Health Service. Achievements include coordinating and extending existing, but fragmented, recycling programs; and establishing links between the Royal Hobart Hospital and the University of Tasmania Sustainability Officer.

In South Australia, the advocacy efforts of DEA anaesthetists, Dr Ingo Weber and Dr Graeme McLeay, enabled the introduction of PVC recycling into one public hospital (Lyell McEwin Hospital) and one private hospital (Burnside Hospital) in 2017. DEA is hoping this will be the springboard for further public and private hospitals to become involved in PVC recycling and improved waste awareness and practices in the near future.



In Western Australia, DEA members Prof Bruce Armstrong, Dr Richard Yin and Dr George Crisp have continued an ongoing conversation with the new health state minister regarding environmental health and have discussed the state's recently legislated Public Health Act which is to be enacted in stages over several years. DEA has asked that the Health Minister review and accelerate implementation of the Act.

Sue Taylor has been involved in initiating Osborne Park Hospital to become part of the Global Green and Healthy Hospitals Network, with interest from doctors at Sir Charles Gardiner Hospital to do likewise.

## **DEA is a founding partner for the Carbon Neutral Adelaide initiative**

On 27<sup>th</sup> October 2016, DEA members in South Australia met with Martin Haese, Lord Mayor of Adelaide, to discuss issues related to climate change and health. As a result, DEA was invited to become a Founding Partner of the Carbon Neutral Adelaide initiative. At the end of the meeting the Lord Mayor said:

"We want to put a human lens on the carbon neutral Adelaide plan. We want to see what sort of impact this has on people from a potential harm and benefit perspective... I can see a lot of alignment with DEA here because Doctors for the Environment can add some gravitas to our agenda."



Dr Graeme McLeay (DEA), the Hon Ian Hunter (SA Minster for Sustainability, Environment and Conservation), Dr Ingo Weber (DEA) and Martin Haese (Lord Mayor of Adelaide) at the Carbon Neutral Adelaide launch

Carbon Neutral Adelaide<sup>80</sup> is a shared ambition to work together and make the City of Adelaide the world's first carbon neutral city. As a Founding Partner<sup>81</sup> DEA will contribute expert evidence-based health perspectives and considerable experience in public health to each of the five pathways of the Carbon Neutral Adelaide initiative: energy efficient built form; zero emissions transport; towards 100% renewable energy; reducing emissions from waste and water; and offsetting carbon emissions.

Since the initial meeting, our committee members have met a number of times with

Adelaide City Council (ACC) staff working on the Carbon Neutral Adelaide initiative. We gave a presentation at a Public Forum to the full ACC; we have shared a *Building Nutrition* forum with architects and design students; and we attended the launch of Carbon Neutral Adelaide with the Lord Mayor and Minister for Sustainability, Environment and Conservation.

DEA plans to promote the carbon-neutral incentives offered for business by the ACC to medical practices and hospitals in the city and to encourage local government in other areas to consider offering similar incentives. We are excited about the possibility of partnering with the AMA in these matters. Our role as Founding Partner also gives us opportunities to build relationships with state government, particularly in health and the environment.



## Education

Education is integral to all DEA's activities and one of our core objectives. This is our role in meetings with elected representatives when we present them with medical facts and leave them to make judgement. Similarly, education is foremost in the meetings we hold with professional colleagues and with the community.

This year's educational highlight was the annual iDEA17 meeting held in Melbourne in April. It was a great success and a source of information and inspiration for all. For more information, see the iDEA17 section below. Many other meetings have been held in all states.



WA Health, Energy and Climate Change Symposium

The Western Australia meetings, held prior to the state election deserve special mention. A public forum on *Energy, climate* change and health was held on 9th February 2017 at Edith Cowen University, featuring DEA member Professor Fiona Stanley and Michael Lord from Beyond Zero Emissions. The WA Health. Energy and Climate Change oneday Symposium was held at Fiona Stanley Hospital in February with over 170 registrants, and featured DEA speakers Professors Fiona

Stanley, Bruce Armstrong, and Peter Newman. Present were representatives from medical organisations, doctors, medical students, other health professionals and members of the wider community.

DEA continues its work in disseminating scientific information to doctors, students, politicians and the public about the health impacts of environmental degradation. DEA gave talks at Western Australia's Rural Practice Health Education conference for doctors and students and talks on many other topics are detailed in the other sections of this Annual Report.

DEA members have been influential in teaching medical students about climate change and health and have worked to ensure this issue is more prominent in the medial curriculum.

This year has also seen the completion of several fact sheets on the health impacts of climate change, severe weather events and Adani's proposed coal mine. These fact sheets require a large amount of work and are a valuable educational resource.



#### **Fact sheets**



Climate Change and Health in Australia Fact Sheet<sup>82</sup>

https://www.dea.org.au/wp-content/uploads/2017/02/DEA Climate Change Health Fact Sheet final.pdf



Climate Change and Health in Australia Mini Fact Sheet<sup>83</sup>

https://www.dea.org.au/wp-

content/uploads/2017/02/DEA Climate Change Health Mini Fact Sheet final.pdf



Heatwave Fact Sheet84

https://www.dea.org.au/wp-content/uploads/2017/02/DEA Heatwaves Health Fact Sheet 06.pdf



Coal's Toll on Health<sup>85</sup>

https://www.dea.org.au/wp-content/uploads/2017/07/DEA-Health-Toll-of-Coal-Fact-Sheet\_final.pdf



Adani's Carmichael Coal Mine and Health Fact Sheet<sup>86</sup>

https://www.dea.org.au/wp-content/uploads/2017/05/DEA-Adani-Long-Fact-Sheet final.pdf



Adani's Carmichael Coal Mine and Health Mini Fact Sheet<sup>87</sup>

https://www.dea.org.au/wp-content/uploads/2017/05/DEA-Adani-Short-Fact-Sheet final.pdf



Severe Storms Floods and Your Health Fact Sheet<sup>88</sup>

https://www.dea.org.au/wp-content/uploads/2017/03/DEA-Storms-Flood-Fact-Sheet web.pdf



## **Events**

#### **iDEA17** Conference

The iDEA conference is DEA's annual national educational event. iDEA17 was hosted by DEA's Victorian Committee in Melbourne and held at the University of Melbourne. The theme was 'global problems, local solutions' with talks and workshops that focused on informing and empowering delegates.

In the course of the two-day conference, 25 speakers addressed over 200 delegates. The video of each complete talk is available at <a href="https://armchairmedical.vhx.tv/idea">https://armchairmedical.vhx.tv/idea</a>
There were also 12 breakout workshop sessions that focused small group discussions on actions individuals and the medical community can take against climate change. DEA members and state committees embraced these sessions as a springboard for post-conference activities.

As well as education and discussion forums, iDEA17 provided opportunities for networking, making friends, and reflecting. Delegates came together on Saturday evening for a social function where they enjoyed witty environmental medical stand-up comedy. Delegates were also given time to breathe and reflect with pre-conference yoga and intersession seated yoga breaks.

The conference closed with inspiring talks on how to create local and global action on climate change and reflections on how to keep sane and avoid burnout.

The convenors would like to thank the iDEA17 committee, the Victorian State Committee and the DEA Management Committee for their support in putting iDEA17 together. Likewise, DEA heartily congratulates convenors Laura Beaton and Jessica Shipley for their calm, tireless and inspiring work in pulling together such a major successful event. We are looking forward to next year's conference!





#### Social activities

Recent years have seen DEA enter teams in fun runs, which provide an opportunity for members and friends to come together in an activity which embodies our "healthy planet, healthy people" message. During this year we have had teams run in the Brisbane marathon festival in August 2016, the Sydney running festival in September 2016 and the Melbourne marathon festival event in October 2016. These events promote team-building, a focus on physical activity and provide an opportunity to invite colleagues to become involved. Of course, the teams look fantastic in their running singlets, spreading the message even wider.



Other social activities throughout the year include screenings of environmental movies often coupled with an invited speaker; end of year drinks or dinner; an educational weekend in the Hunter Valley; a bushwalk in Tasmania; and a bike ride in Fremantle.

## National nature photography competition: people country planetary health



One of the winning photographs – Uluru Star Trail by Dan Lack (Queensland medical student)

New South Wales DEA members, led by Dr Liz O'Brien, ran the inaugural Nature Photography Competition which encouraged people to submit photographs and a short paragraph which highlighted the connection between people and planetary health. The competition was launched on the 27<sup>th</sup> April at the Westmead Institute for Medical Research in

Sydney, with speakers including Professor Nicholas Talley and Professor Angus Dawson. It attracted over 40 entries from around the country, both DEA members and the general public. The competition closed in July 2017.



## Briefing Parliamentarians

#### **Parliamentary visits**

This essential part of DEA activity, briefing Federal Members and Senators on the health aspects of climate change and related issues, has encountered many difficulties in the current year and we have not accomplished as many visits and meetings as in previous years. We identify Coalition reluctance to meet and to participate<sup>89</sup>, as one of the confounding factors due to the significant politicisation of climate and energy policy. However, we have held meetings with a number of ministers and shadows as well as some members of parliament.

State members of parliament have been met and briefed in all states on a wide range of health and environmental issues

#### **Submissions**

A vital part of DEA activity is to present scientific and medical evidence on the health impacts of climate change to representatives of government and to other organisations.

We should never underestimate the impact of such documents as public records, open to politicians, policy makers and many others. They contribute towards developing our own policy positions and provide the intellectual and scientific foundations of our efforts to educate the medical profession, the media, the community, politicians and policy makers.

Although an immediate change may not result from a submission, the credibility of these formal submission documents can incrementally contribute towards major health benefits through environmental policy advances.

This has undoubtedly been so, exemplified by the legal case against the Acland open cut coal mine expansion in Queensland and the decision to construct a large scale solar thermal power plant with battery storage in Port Augusta, South Australia. In each case careful research documented in earlier submissions prepared the way for a successful outcome.

DEA will not be fulfilling its charter if it seeks to outsource the writing of submissions or development of policies. Our greatest strength to date has been willingness to tackle the hard work of researching, writing and educating. We should continue to establish collaborative links with other individuals and organisations sharing the same broad goals but from different perspectives.



#### In the year 2016-17 we have made 21 submissions, listed below:

Protecting the Yarra River (Birrarung), August 2016

https://www.dea.org.au/wp-content/uploads/VIC Protecting the Yarra-Birrarung Submission 08-16.pdf

Advancing climate action in QLD, September 2016

https://www.dea.org.au/wp-content/uploads/2017/02/Advancing-Climate-Action-in-Qld-submission-09-16.pdf

ARENA Submission to the Senate Standing Committees on Economics, September 2016

https://www.dea.org.au/wp-content/uploads/2017/02/ARENA-submission-to-the-Senate-Standing-Committees-09-16 DS.pdfARENA

Coal policy submission – VIC, September 2016

https://www.dea.org.au/wp-content/uploads/2017/02/Submission-to-Victorian-Government-on-Coal-Policy-09-16.pdf

Jemena Northern Gas Pipeline EIS, October 2016

https://www.dea.org.au/wp-content/uploads/2017/02/Jemena-Northern-Gas-Pipeline-EIS-submission-10-16.pdf

Inquiry into Treaties: Paris Agreement, October 2016

https://www.dea.org.au/wp-content/uploads/2017/02/Inquiry-into-Treaties-Paris-Agreement-10-16.pdf

NSW Rocky Hill Mine Project, October 2016

https://www.dea.org.au/wp-content/uploads/2017/02/Rocky-Hill-Mine-Project-Submission-10-16.pdf

Inquiry into Hydraulic Fracturing of Unconventional reservoirs onshore within the NT 2016 (ToR), October 2016 https://www.dea.org.au/wp-

content/uploads/2016/10/NT Inquiry into Hydraulic Fracturing of Unconventional Reservoirs submission 10-16.pdf

VIC - Loy Yang B works approval, October 2016

https://www.dea.org.au/wp-content/uploads/2017/02/VIC-Loy-Yang-B-works-approval-submission-10-16.pdf

Retirement of coal fired power stations, November 2016

https://www.dea.org.au/wp-content/uploads/2017/02/Retirement-of-coal-fired-power-stations-submission-11-16.pdf

NSW - Review of load-based licencing, December 2016

https://www.dea.org.au/wp-content/uploads/2017/02/NSW-Review-of-the-load-based-licensing-scheme-submission-12-16.pdf

Clean Air for NSW Consultation Paper, January 17

https://www.dea.org.au/wp-content/uploads/2017/02/Clean-Air-for-NSW-Consultation-Paper-submission-01-17.pdf

Tasmanian Energy Security Taskforce, January 2017

https://www.dea.org.au/wp-content/uploads/2017/02/Tasmanian-Energy-Security-Taskforce-Submission-01-17.pdf

Preliminary Report of the Independent Review into the Future Security of the National Electricity Market, February 2017

https://www.dea.org.au/wp-content/uploads/2017/03/Submission-on-the-Future-Security-of-the-National-Electricity-Market-02-17.pdf

Better Fuel for Cleaner Air Discussion Paper, March 2017

https://www.dea.org.au/wp-content/uploads/2017/03/Submission-on-Better-Fuel-for-Cleaner-Air\_03-17.pdf

Inquiry into the rehabilitation of mining and resources projects as it relates to Commonwealth responsibilities, April 2017

https://www.dea.org.au/wp-content/uploads/2017/04/Submission-into-the-rehabilitation-of-mining-and-resources-projects-04-17.pdf

Action on the land: reducing emissions, conserving natural capital and improving farm profitability, April 2017 https://www.dea.org.au/wp-content/uploads/2017/05/Action-on-the-land-submission-04-17.pdf

Hydraulic Fracturing in the Northern Territory, April 2017

https://www.dea.org.au/wp-content/uploads/2017/04/Scientific-Inquiry-into-Hydraulic-Fracturing-in-the-NT-Submission-04-17.pdf

Special Review of power system security, electricity prices and emissions reductions, May 2017

https://www.dea.org.au/wp-content/uploads/2017/05/Special-Review-of-power-system-security-electricity-prices-and-emissions-reductions-submission-05-17.pdf

Narrabri Gas Project, May 2017

https://www.dea.org.au/wp-content/uploads/2017/05/Narrabri-Gas-Project-Submission-Final-05-17.pdf

Review of Australia's Climate Change Policy discussion paper, May 2017

https://www.dea.org.au/wp-content/uploads/2017/08/Submission-to-the-Review-of-Climate-Change-Policies-05-17.pdf



## Media and communications

DEA has continued to make strides in educating medical colleagues, politicians and the public about the need to protect health from environmental harms—both existing and potential.

Our message is compelling: it is evidence based, wholly independent and delivered by medical doctors – one of the most trusted professions.



Dr Richard Yin at the RenewWA launch Image courtesy of RenewWA

Many of our energetic and committed members have worked hard to raise awareness of DEA's

vision, "Healthy Planet, Healthy People". We have spoken out in comment pieces; we have been interviewed on radio, television and for print news stories; we have appeared in major feature articles; we have written letters to the editor; and we have connected on Facebook and Twitter with our growing number of followers.

The topics have been many and varied:

- Tackling the health effects of climate change through policy recommendations.
- Rejecting all new coal mines on health grounds, including the proposed mega Adani coalmine.
- Improving air quality by closing down coal-fired power stations such as Hazelwood (Victoria), and imposing stricter fees on polluters.
- Introducing higher fuel efficiency standards for vehicles.
- Unconventional gas and its potential health hazards.
- Preserving forests and biodiverse places such as the iconic Great Barrier Reef and the Beelair wetlands (Western Australia).
- The urgent need to transition to clean, renewable energy that will not harm human health or the planet.
- A solar thermal plant for Port Augusta (South Australia) as a clean energy source.

DEA has supported other groups with their advocacy endeavours. We have publicised initiatives such as RenewWA which is calling for renewable energy for Western Australia, and we contributed speakers to the Climate Council's launch of *Risky Business: Health, climate and economic risks of the Carmichael coalmine*.





Prof Peter Brooks presents at launch of Climate Council's Risky Business

DEA has spoken out without fear or favour. We have challenged both federal and state governments about their failure to put public health front and centre in their policies; we have highlighted how coal mining giants such as Adani will put community health at risk if their plan to dig coal goes ahead.

Furthermore, as the major transformation from old to new media continues unabated, how we publicise our work has had to change. DEA has shown it is nimble and able to embrace this evolving media landscape.

While we continue to work with traditional media, we have also put resources into social media. The appointment of a part-time digital editor has enabled colleagues and the wider public to closely follow DEA's work, news and events; keep up to date with local and international health and environment news; and to engage and extend our networks.

Our media-savvy members have been active participants in this change. Many of them have keenly become involved in posting on our various social media channels while some have made short videos which have proved very popular.

The many challenges to public health over the last 12 months have once again illustrated the need for DEA's powerful voice. Whether in print, on radio, on TV or on social media, our message has been potent and clear: without a healthy planet, we cannot have healthy people.

#### Media releases

SA Power Crisis - Add the true costs of coal and gas to the energy bill, urge doctors, David Shearman, 19 July 2016

https://www.dea.org.au/media-release-sa-power-crisis-add-the-true-costs-of-coal-and-gas-to-the-energy-bill-urge-doctors-healthy-planet-healthy-people-dea/

Energy Ministers Urged to put Health at the Top of the COAG Agenda, Graeme McLeay, 18 August 2016 <a href="https://www.dea.org.au/media-release-energy-ministers-urged-to-put-health-at-the-top-of-the-coag-agenda/">https://www.dea.org.au/media-release-energy-ministers-urged-to-put-health-at-the-top-of-the-coag-agenda/</a>

Doctors warn against gas as a "transitional fuel" due to concerns about its safety, Graeme McLeay and Liz Bashford, 23 August 2016

https://www.dea.org.au/media-release-doctors-warn-against-gas-as-a-transitional-fuel-due-to-concerns-about-its-safety/

Doctors slam Adani mine decision, David King and George Crisp, 29 August 2016 https://www.dea.org.au/media-release-doctors-slam-adani-mine-decision/

Vic government gas ban a big win for health, say doctors, Liz Bashford, 30 August 2016 <a href="https://www.dea.org.au/media-release-vic-government-gas-ban-a-big-win-for-health-say-doctors/">https://www.dea.org.au/media-release-vic-government-gas-ban-a-big-win-for-health-say-doctors/</a>

Palaszczuk support for Carmichael mine will fail Australians, warn health experts, David Shearman, 10 October 2016

https://www.dea.org.au/media-release-palaszczuk-support-for-carmichael-mine-will-fail-australians-warn-health-experts/

SA Government urged to pull its weight in response to the climate meeting in Morocco, David Shearman, 9 November 2016

https://www.dea.org.au/media-release-sa-government-urged-to-pull-its-weight-in-response-to-the-climate-meeting-in-morocco/

US election: Where to for health and the environment? 10 November 2016 <a href="https://www.dea.org.au/media-release-us-election-where-to-for-health-and-the-environment/">https://www.dea.org.au/media-release-us-election-where-to-for-health-and-the-environment/</a>

DEA welcomes landmark Lancet Countdown, David Shearman, 14 November 2016 <a href="https://www.dea.org.au/media-release-dea-welcomes-landmark-lancet-countdown/">https://www.dea.org.au/media-release-dea-welcomes-landmark-lancet-countdown/</a>



Doctors slam Australia's "shameful" ranking in climate change performance index, John Iser and David Shearman, 19 November 2016

https://www.dea.org.au/media-release-doctors-slam-australias-shameful-ranking-in-climate-change-performance-index/

Government must phase out coal-fired power stations within the next decade, David Shearman, 29 November 2016

https://www.dea.org.au/media-release-government-must-phase-out-coal-fired-power-stations-within-the-next-decade/

Former Australian of the Year warns Adani coalmine poses a significant public health risk, Fiona Stanley and David Shearman, 5 December 2016

https://www.dea.org.au/media-release-former-australian-of-the-year-warns-adani-coalmine-poses-a-significant-public-health-risk/

Turnbull must consider his position if he cannot chair COAG Leaders meeting with an open mind, David Shearman, 8 December 2016

https://www.dea.org.au/media-release-turnbull-must-consider-his-position-if-he-cannot-chair-coag-leaders-meeting-with-an-open-mind/

Medical experts call for a price rise on coal-fired power to protect health, Ben Ewald, 16 December 2016 <a href="https://www.dea.org.au/media-release-medical-experts-call-for-a-price-rise-on-coal-fired-power-to-protect-health/">https://www.dea.org.au/media-release-medical-experts-call-for-a-price-rise-on-coal-fired-power-to-protect-health/</a>

Time to clean up our air, Ben Ewald, 19 January 2017 <a href="https://www.dea.org.au/media-release-time-to-clean-up-our-air/">https://www.dea.org.au/media-release-time-to-clean-up-our-air/</a>

Doctors concerned about ongoing and future health threats from Loy Yang B upgrade, Eugenie Kayak and John Iser, 26 January 2017

https://www.dea.org.au/media-release-doctors-concerned-about-ongoing-and-future-health-threats-from-loy-yang-b-upgrade/

Senate Inquiry – You're more likely to die from air pollution than road accidents, NSW health experts warn, John Van Der Kallen and Ben Ewald, 22 February 2017

https://www.dea.org.au/senate-inquiry-youre-more-likely-to-die-from-air-pollution-than-road-accidents-nsw-health-experts-warn/

Traffic hot spots are making our children sick, warn doctors, Karen Kiang and David Shearman, 9 March 2017 https://www.dea.org.au/media-release-traffic-hot-spots-are-making-our-children-sick-warn-doctors/

Doctor training needs to step up on climate change, urge health experts, Grant Blashki, 29 March 2017 <a href="https://www.dea.org.au/media-release-doctor-training-needs-to-step-up-on-climate-change-urge-health-experts/">https://www.dea.org.au/media-release-doctor-training-needs-to-step-up-on-climate-change-urge-health-experts/</a>

Healthy planet, healthy people: Leading doctors call for urgent action, Bastian M Seidel and Grant Blashki, 29 March 2017

https://www.dea.org.au/media-release-healthy-planet-healthy-people-leading-doctors-call-for-urgent-action/

Are Australia's Emergency Response systems prepared for the Climate Emergency? Stephen Parnis, 1 April 2017 https://www.dea.org.au/media-release-are-australias-emergency-response-systems-prepared-for-the-climate-emergency/

PFOA spill, Andrew Jeremijenko, 15 April 2017 <a href="https://www.dea.org.au/media-release-pfoa-spill/">https://www.dea.org.au/media-release-pfoa-spill/</a>

NT Government must stick to moratorium on fracking, urge doctors, Rosalie Schultz and David Shearman, 2 May 2017

https://www.dea.org.au/media-release-nt-government-must-stick-to-moratorium-on-fracking-urge-doctors/

Electricity review raises more questions than answers, John Iser and David Shearman, 8 May 2017 https://www.dea.org.au/media-release-electricity-review-raises-more-questions-than-answers/

Doctors call for stricter pollution license fee system to protect health, Ben Ewald, 14 May 2017 https://www.dea.org.au/media-release-doctors-call-for-stricter-pollution-license-fee-system-to-protect-health/

Doctors deliver message to Commonwealth Bank chiefs: For health's sake, don't fund Adani's coal mine, Sujata Allan, 18 May 2017

https://www.dea.org.au/doctors-deliver-message-to-commonwealth-bank-chiefs-for-healths-sake-dont-fund-adanis-coal-mine/

Open letter to the Northern Australia Infrastructure Facility Board re: funding for Adani, Kingsley Faulkner, Stephen Leeder, Peter Brooks, David Shearman and Fiona Stanley, 5 June 2017 <a href="https://www.dea.org.au/dea-letter-to-naif-board/">https://www.dea.org.au/dea-letter-to-naif-board/</a>

Open letter to the NAIF Board, Kingsley Faulkner, Peter Brooks, David King, 5 June 2017 https://www.dea.org.au/media-release-open-letter-to-the-naif-board/



Doctors and nurses join forces to urge Commonwealth Bank chiefs not to fund the Adani mine - for health's sake, Sujata Allan and John Van Der Kallen, 6 June 2017

https://www.dea.org.au/media-release-doctors-and-nurses-join-forces-to-urge-commonwealth-bank-chiefs-not-to-fund-the-adani-mine-for-healths-sake/

Why the Finkel report fails Australians, David Shearman, 8 June 2017 <a href="https://www.dea.org.au/medial-release-why-the-finkel-report-fails-australians/">https://www.dea.org.au/medial-release-why-the-finkel-report-fails-australians/</a>

Young doctors shout out to @Commonwealthbank: #NoNewCoal, Kaiya Ferguson and Sujata Allan, 27 June 2017

https://www.dea.org.au/media-release-young-doctors-shout-out-to-commonwealthbank-nonewcoal/

#### Social media

In the 2016-2017 period, DEA had a 42% increase in Facebook likes and a 37% increase in Twitter followers in the past 6 months.

#### **DEA Promotional posts**



DEA Adani Fact Sheet with Professor Fiona Stanley 27-May-17 35,552 people reached 203 reactions https://www.facebook.com/DocsEnvAus/posts/10155414926498331



iDEA Video: *iDEA17 is coming* to *Melbourne...*18-Feb-17
19,371 people reached
10,523 views, 435 reactions
<a href="https://www.facebook.com/DocsEnvAus/videos/10155094687728331/">https://www.facebook.com/DocsEnvAus/videos/10155094687728331/</a>

Heatwaves Fact Sheet: Climate change will amplify heat-related illnesses like dehydration, heat stress & heat stroke.

30-Nov-16

7,745 impressions,
108 engagements

https://twitter.com/DocsEnvAus/st
atus/804113724256571392

#### **DEA in Action**



We stand with the Australian community against the Carmichael coal mine. As medical

professionals, we condemn any decision to finance such a profound health risk 5-Dec-16 10,127 people reached 523 reactions https://www.facebook.com/DocsEnvAus/photos/a.179538088330.1250 43.82125138330/10154835969638 331

Dr Graeme McLeay's
Independent Australia article:
Doctors call for fossils fuels to
be labelled an unacceptable
health hazard
4-Aug-16
5,896 impressions
50 engagements
https://twitter.com/DocsEnvAus/st
atus/761178087656566784

@DrGCrisp does a superb job of counting the savings of transitioning to #renewable energy in a letter to @westaustralian #solarpower 18-Dec-16 5,595 impressions 154 engagements https://twitter.com/DocsEnvAus/st atus/810645343591395328

#### **Shared media post**

"Doctors reject AMA chief's stance on Hazelwood closure and health", The Guardian, 2-Apr-17 8,858 people reached 202 reactions https://www.facebook.com/DocsEn vAus/posts/10155232357993331

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## Student action

The year 2016-17 was a very active for DEA students, filled with events, campaigns, recruitment and education. Significant activities included iDEA17, numerous university based events, and a number of DEA promotions. Notable changes for the organisation included the creation of the new National Student Committee (NSC) positions of treasurer, graphic designer, and media editor, the creation of the DEA year representative position, and approval for a DEA students' budget.

The main goals and achievements of DEA students for the period were:

- Continue to grow the profile of DEA within the medical schools of Australia.
- Continue to educate Australian medical students on major national environmental issues, and the link between the environment and human health.
- Continue to grow the student membership base of DEA.
- Contribute to a successful iDEA17.



DEA National Student Committee 2016-2017

#### **University Based Events**

Following approval of a budget for DEA students, a funding application was devised by the NSC and relayed to the DEA Student Representatives, encouraging University and Year Representatives to apply for funding to host events. In 2016-17 four events were held. Funding was also granted for a variety of creative events, including dinner and documentary nights, Q&A sessions and James Cook University's escape room — an event where students were required to solve environmental problems to gain clues to escape their captivity. The events were approved for funding at James Cook University, University of Newcastle, University of New South Wales, University of Western Australia, Melbourne University, University of Tasmania, University of Adelaide and Flinders University, as well as funding for the SE Queensland universities to attend the Gold Coast Marathon.

Beyond these funded events, DEA student groups within universities have continued to coordinate highly successful, educational, and engaging events and campaigns over the year. Some examples of these include DEA students at University of Queensland organising volunteer trips to Moreton Island to work on biodiversity projects; the establishment of a Green Health Tasmania Group following a documentary and Q&A session held by DEA students and the University of Tasmania global health group, who are committed to minimising the environmental impact of hospitals; and countless events partnered with Fossil Free and Stop Adani groups that have engaged medical students in the fight against new coal and fossil fuel extraction.



These events were invaluable for realising the goals of DEA students, chiefly, increasing the profile of DEA amongst the medical students of Australia, and for continuing to grow the DEA student membership base. The students of DEA must be congratulated on their commitment to spreading awareness on these issues.

#### **Student Member Recruitment**

The DEA student membership base has continued to grow with a current membership of 262 active student members. This has mainly resulted from the success of the annual iDEA recruitment competition, surpassing the success of the previous year, with the recruitment of 105 new members and the extension of 21 current memberships.

In some states, a policy whereby participants must be DEA student members in order to attend particular events has been successful in attracting new members and is likely to be used for future events in all states.

#### iDEA17



DEA students at iDEA17

DEA students made a significant contribution to the success of iDEA17 in Melbourne, with the conference being co-convened by the NSC's Victoria State Representative, Jess Shipley. Further assistance was provided in the form of promotion via social media and other DEA student networks, cross-promotion via the iDEA17 recruitment competition, and by many student members helping out with setting up and running the event itself. The NSC sought, and were

granted, approval from the DEA Management Committee for free iDEA17 registration for all members of the NSC and all University Representatives, which contributed to an excellent turn out, allowing productive face-to-face meetings in Melbourne.

See the **iDEA17 Report** for more information.

#### **Social Media**

The DEA students Facebook (facebook.com/DEAstudents/) and Instagram (@DEA\_students) pages were established in February 2017 to provide content targeted to student members. The pages have garnered an impressive following in a short space of time, with the Facebook page being followed by 454 people, and the Instagram page being followed by 107 people – with much growth attributed to the DEA Students 'Make-a-Meme for DEA' competition. Content is added on a regular basis and is well received by our followers. All DEA student and doctor members are invited to follow both pages.



## Our people

DEA's achievements are possible because of the many volunteer doctors and medical students who generously donate their expertise and time to ensure a healthy planet, healthy people for current and future generations.

A number of committees support the work we do:

#### **Our Scientific Committee**

A distinguished number of scientists provide evidence-based support for the work we do:

Professor Stephen Boyden AM Professor Chris Burrell AO Professor Peter Doherty AC

Nobel Prize, 1996, Australian of the Year, 1997

Professor Michael Kidd AM
Professor David de Kretser AC
Professor Steve Leeder AO
Professor Ian Lowe AO
Professor Robyn McDermott

Professor Lidia Morawska Professor Peter Newman AO

Sir Gustav Nossal AC

Professor Hugh Possingham FAA

Professor Lawrie Powell AC Professor Fiona Stanley AC 2003 Australian of the Year Dr Rosemary Stanton OAM

Dr Norman Swan

#### **Our Management Committee**

This committee is responsible for the hands-on running and strategic direction of the organisation:

#### Office Bearers 2016-17

#### Chair

Professor Kingsley Faulkner AM

Professor, School of Medicine, University of Notre Dame Fremantle and former President of the Royal Australasian College of Surgeons 2001-2003 and former Chairman, Australian Council on Smoking and Health.

#### Secretary

Professor David Shearman AM

Emeritus Professor of Medicine, University of Adelaide. Professor Shearman has contributed to reports Three and Four of the Intergovernmental Panel on Climate Change. He is a former President of the Conservation Council of South Australia.

#### **Treasurer**

Dr Hakan Yaman

Emergency physician and general practitioner with a master's degree in Public Health.

#### **Deputy Chair**

Dr Eugenie Kayak Anaesthetist



#### **Management Committee members 2016-17**

Dr Sujata Allan, General Practitioner

Dr Kristine Barnden, Obstetrician

Professor Peter Brooks, Professorial Fellow at the Centre for Health Policy at the Melbourne School of Population and Global Health

Dr Liz Bashford, Anaesthetist

Dr Marion Carey, Public Health Physician

Dr David King, Academic General Practitioner

Dr John Van Der Kallen, Rheumatologist

Dr John Willoughby, Neurologist

#### **Corresponding members of the Management Committee 2016-17**

Dr George Crisp, General Practitioner

Dr John Iser, Gastroenterologist

Dr Kristen Pearson, Geriatrician

Dr Helen Redmond, Rehabilitation physician

Dr Dimity Williams, General Practitioner

#### **Our National Student Committee**

We are fortunate to have a large contingent of dynamic medical students contribute their time to the work we do:

#### **National Student Representative**

Declan Scragg, third year medical student at the University of Wollongong.

#### **National Student Representative Elect**

Kaiya Ferguson, medical student at the University of Queensland.

#### Secretary

Shannon Lovegrove

#### **State Representatives**

Sophia Hill (NSW)

Daniel Mogg (ACT)

Beau Frigault (QLD)

Vienna Tran (SA)

Bec Tuma (NT)

Lydia Birch (TAS)

Jess Shipley (VIC)

#### **Our Staff**

DEA's volunteer doctors and medical students are supported by our hard-working staff: Joy Oddy, Administration Officer (full-time)

Carmela Ferraro, Communications and Media Coordinator (part-time)

Rebecca Osborne, Administration Assistant (part-time)



## Treasurer's Report

As a result of the generosity and passion of our members, I am pleased to report that the monetary position of DEA has strengthened in the last financial year. We are now in a position to use funds to employ an Executive Officer to help with our ever-increasing workload and support the large contribution of our member base. However, as you would rightly expect, all members of the Management Committee are volunteers and all their DEA expenses self-funded. Our only motivation is the DEA mission.

Our independently audited annual financial statement has been tabled at the Annual General Meeting and will be uploaded as a public document at the Australian Charities and Not-for-profits Commission website (<a href="http://www.acnc.gov.au/">http://www.acnc.gov.au/</a>). We welcome any questions that may arise from the report and are confident that your money has been spent solely to support the guiding mission of DEA in the most cost-effective manner.

## Thank you

There are many to thank for their assistance over the last year. Our hard-working staff members have consistently worked well beyond their job description, reflecting their passion for the organisation and our mission. These members include Joy Oddy who runs our base office, our media consultant Carmela Ferraro and our administrative assistant Rebecca Osborne.

Our deepest gratitude extends also to our accountant Cameron Batterham from Batterham & Associates. He has generously donated his time to independently prepare and audit the DEA Annual Financial Statement. His support for DEA has now continued for over a decade.

Finally, our thanks to all our members for their invaluable contributions, the spectrum of which is from simply maintaining your membership to extensive involvement with our State and National Management Committees. Many of you have now been with us for over a decade and are now being joined by large numbers of our student colleagues.

Our collective voice is powerful and we must use it to educate and advocate against the devastating health consequences of environmental destruction. We look forward to your continued support in 2018 and beyond.



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