



# THE DIVESTMENT CAMPAIGN: A JUST RESPONSE TO CLIMATE INACTION

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**Dear reader,**

The central purpose of this report is to present the case for divestment from fossil fuels and to highlight that this is not just an environmental issue but a political, economic and moral one as well. The divestment movement is growing globally, with over 450 institutions, pension funds, universities and faith-based organisations having committed to divest, including the World Council of Churches.

Divestment is not new to South Africa. It was a central component of the anti-apartheid sanctions campaign and proved to be a hugely important tactic against the apartheid regime and those that supported it.

Divestment that was directed against apartheid was significant for two reasons. First, to highlight the individual and collective moral imperative to oppose apartheid itself and second, to expose the apartheid system as inherently unsustainable and destructive to the majority of the people and the country. As such, the divestment movement empowered ordinary citizens and individuals around the world to voice their opposition to an oppressive and unjust system, to place economic and social pressure on those who invested in it, and to become involved in a bigger movement for change.

The same thing can now be said of the fossil fuel divestment movement. Its motivations are strikingly parallel: – a moral imperative to act against those who profit from exploitation and societal destruction; and to mobilise climate justice fighters across the world to take individual and collective action.

The climate change crisis is one of the biggest challenges of our time. We are increasingly experiencing devastating floods, drought and rising temperatures, which are felt through (amongst other things) water shortages, food price hikes and increasing numbers of climate migrants. Crucially for those who live in Africa and the Arab world, the science and material reality consistently shows that the effects of climate change are hitting this part of our world the hardest.

Not surprisingly though, fossil fuel companies are painting themselves as the developmental saviours of Africa and the Arab world. They claim that fossil fuels are the answer to these regions poverty and various other economic problems and that fossil fuel divestment

activists and those pushing for a clean energy future are killing the people's developmental dream. Sound familiar? Well, such arguments are virtually identical to what the apartheid regime and those who supported it used to counter the anti-apartheid divestment movement in the 1980s.

The question that we must ask of these naysayers is; development for whom? The reality is that communities who, for example, live near coal mines and power plants have had to confront the horrific health impacts of polluted water and air for generations. This is clearly not the kind of development that those on the frontline of climate change want or need. Divestment is both a more immediate, material catalyst for positive developmental change and part of a longer-term struggle for climate justice.

The fossil fuel divestment movement stands for a just transition away from dirty and harmful fossil fuel energy. In particular, 350Africa.org is calling on banks in South Africa to disclose exactly how much they invest in coal, oil and gas and commit to stop any future funding of fossil fuel projects. These banks claim that they practice corporate sustainability and are proud to speak of how green they are with zero emissions operations yet at the same time they invest billions of Rand in fossil-fuel refineries, mines and power-stations across Africa.

Fossil fuels are fast becoming developmental dinosaurs Our future is in clean, renewable sources of energy but we must act now!

Archbishop Desmond Tutu was one of the highest profile supporters of the anti-apartheid divestment movement and today he has once again come to the fore in support of the global fossil fuel divestment movement. He has stated that the destruction of the earth's environment is the human rights challenge of our time and that "people of conscience need to break their ties with corporations financing the injustice of climate change,"

Now is the time for action! The divestment movement of the 21st century gives each one of us an opportunity to make a difference and become climate fighters for developmental justice. Join us!

*Forward to a zero carbon future,*  
Ferrial Adam  
350 Africa and Arab World Team Leader



## GLOSSARY

The following definitions have been drawn from the work of the CarbonTracker initiative and seek to explain current understanding of the economic case for divestment from coal and fossil fuel.

TERM	DEFINITION
Unburnable Carbon	Fossil fuel energy sources which cannot be burnt if the world is to adhere to a given carbon budget.
Stranded Assets	Energy resources which, at some time prior to the end of their economic life, are no longer able to earn an economic return as a result of changes in the market and regulatory environment associated with the transition to a low-carbon economy.
Wasted Capital	High-carbon fossil fuel projects are usually also the most expensive, and require high break-even prices to be profitable. Capital investment in such projects could end up wasted capital in a demand and carbon-constrained world.
Fossil Fuel Risk Premium	Additional factor which needs to be integrated into analysis of high-cost, high-risk fossil fuel assets to ensure climate risk is priced properly, and capital is allocated to align with the transition to a low-carbon future.

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## EXECUTIVE SUMMARY

History attests to the success that divestment for ethical considerations has achieved in multiple contexts and in addressing a number of different moral concerns. Whether focused on apartheid in South Africa, tobacco, HIV pharmaceuticals, munitions or human rights, the evidence reflects that activism efforts based on divestment have the capacity to significantly mobilize public opinion and ultimately 'force the hand' of policymakers and corporations seeking to maintain an unjust, unsustainable and indefensible status quo.

***“The aims of the fossil fuel divestment movement, like the anti-apartheid, tobacco and other divestment movements before it, are to raise awareness, stigmatize a powerful political opponent and win changes in government policy.”<sup>i</sup>***

Superficial critics of the latest divestment movement like to argue that its application to fossil fuel is different in nature and purpose to the past issues it has sought to affect, that it is an over-emotive response that aims to simply bankrupt fossil fuel companies, harm the developing world's poor; send capital markets back into turmoil and push the world into a new financial crisis. Careful consideration of the substance in these arguments (or the lack thereof) should cause us to ask how much longer we can allow “figures of influence to peddle this piffle with impunity”.<sup>1</sup>

Although there is only a declining minority of climate change denialists who won't accept that fossil fuel combustion is the single largest contributor to global warming, there is little evidence to suggest that an appropriate response is being mounted by business, governments or civil society. Accepting as fact the link between fossil fuel combustion and global warming must surely compel us to acknowledge that the continued investment in their exploration, extraction and use is the equivalent to financing the accelerating destructive impacts of global warming.

Divestment as a movement is fuelled by concern that both institutional investors and corporate behaviour are not supporting scientific knowledge. Equally important is that this same institutional and corporate investment

behaviour is not reflecting the honest fulfillment of fiduciary duty, despite claims that it is fiduciary duty that drives continued investment in fossil fuel companies. On the contrary, the view that continued investment in fossil fuel is reflective of securities fraud is one that is increasingly worthy of consideration.<sup>2</sup> This calls into question not only the behaviour of companies raising new capital for fossil fuel-related activities; it raises serious concerns about the role market regulators are playing, (or not playing) in ensuring that appropriate climate risk management strategies are in place. By allowing new public listings to take place without a transparent exposition of the related climate risks or the risk of devaluation in the face of imminent global policies that may strand carbon assets and render investments worthless, market regulators are clearly not fulfilling their role in ensuring the stability of the market, given appreciation of imminent policy and associated value adjustments.

***“Companies are clearly betting that governments will do nothing. This is the largest crisis in the history of humanity. In addition to the fundamental financial issue, there's a fundamental moral issue. You're getting money from companies whose business model is to destroy the planet.”<sup>ii</sup>***

Divestment seeks to raise the volume of essential voices to counter this inaction, to challenge big oil, big coal and the vested interests of a system that supports them, and to confront the power dynamics that allow money to follow financial gains above all else. It seeks to promote behavioural acceptance of the fact that “the world is truly at the cusp of the end of the fossil fuel era”<sup>3</sup> and to ensure that investment institutions, and the individuals or organisations on whose behalf they act, vote with their financial investments accordingly.

If the world is to avoid exceeding the 2°C temperature increase widely considered safe for life, up to 80% of known fossil fuels reserves should not be extracted for use. This means immediate and meaningful measures must be put in place to curb fossil fuel use. Without these, many believe that it is more likely that the world is heading for a significantly higher (4 – 6°C) rise in temperature.<sup>4</sup> Unknown and



unexpected feedback loops at this level will have enormous impact on social, environmental and economic wellbeing and ultimately on political stability. The interactions that these multiple stressors will have will also act to enhance the vulnerability of those already facing high levels of risk and exposure, typically the already poorest of the poor, lessening resilience and adaptive capacity in under-resourced areas.<sup>5</sup> Already, the costs associated with climate-related disasters have stretched economies and aid budgets the world over. Future costs and risks associated with continued global warming for the strongest economies are hard to justify. More importantly, for the most vulnerable and poor in developing world context these are simply untenable.

***“It is in everyone[’s]... interest to have everyone do something. [Climate change] is a massive social action problem.”<sup>iii</sup>***

This paper seeks to understand the business case in support of the divestment movement on the basis of an analysis of the cost-benefit of action versus inaction in social and economic spheres. It seeks to clearly outline and present an unemotional perspective of what the divestment argument is really asking for and reflect on how it supports, and is supported by, similar action calling for greater investor transparency and accountability; increased shareholder activism and corporate engagement; and a growing movement towards litigation against laggards intent on maintaining

investments in high carbon emitting assets.

Integrated into this analysis, the disabling environment for divestment is explained and identified through the explanation of a “Toxic Triangle”<sup>6</sup> (comprising financial short-termism, vested interests and political inertia). Understanding the common barriers of the “toxic triangle” as a global dynamic that also impacts South Africa and whether an exception is warranted given the country’s developing world context is discussed. In conclusion, it is argued that divestment fulfills an invaluable role, one that has significant merit both in its own right and in the part it plays to catalyze the process of education, awareness raising and engagement of related efforts focused on transitioning the world to a low-carbon future.

## BACKGROUND

### WHAT IS DIVESTMENT?

***“Divestment simply means getting rid of stocks, bonds, or investment funds that are unethical or morally ambiguous.”<sup>iv</sup>***

At its most simple, divestment can be understood as the opposite of investment. “Uninvesting”, divestiture or reduction of capital assets invested in a company is achieved through the sale of shares held in that company. Notwithstanding this explanation, the term divestment is most particularly used to emphasise the intentional withdrawal of support for (investment in) a business. In the context of



the divestment movement, it indicates action taken for social, political, ethical and/or moral reasons and is sometimes also called disinvestment.

## IS DIVESTMENT AN EFFECTIVE TOOL FOR MOBILIZING SOCIAL CHANGE?

Perhaps the most well known example of divestment in this context was reflected in the call for divestment and sanctions against apartheid-era South Africa. The moral imperative presented by the injustices of apartheid, amplified by scores of individuals and civil society groups across the globe, drove investment institutions, mutual funds and retirement funds to sell off the stocks of businesses that had investments or ties to South Africa, encouraging major multinationals to close down and/or sell out of South African business operations.

***“Divestment campaigns have been hugely successful in putting the issue of unburnable carbon on the agenda of investment institutions.”<sup>v</sup>***

Other divestment campaigns have similarly fought stagnant unresponsiveness and won changes in moral behaviour. For example, for years the tobacco industry disregarded or discredited the health-related impacts of nicotine addiction. Tobacco companies denied that lung cancer was a direct result of smoking even whilst annually more than 400,000 Americans were dying from the disease.<sup>7</sup> The tobacco divestment movement was born out of frustration as education leaders and pro-health activists saw the industry profiteering from a socially destructive industry, one heralded as representing respectable, accountable businesses. Vested interests in the tobacco industry included chemists, biotech researchers, movie stars, advertisers and legislators with bountiful tobacco campaign contributions exempting nicotine from drug legislation even though it was found to be one of the most addictive substances.<sup>8</sup> In addition, the United States trade representatives threatened sanctions against countries that prevented U.S. cigarettes being imported and President Carter fired the head of the Department of Health for not easing back on regulation of tobacco.<sup>9</sup> Hegemonic powers in economic and political spheres put their significant weight behind the continued flourishing of the tobacco

industry. Yet the simple but powerful message of the divestment movement shaped the collective moral standing against the tobacco industry, ultimately shaping business and policy regulation for good.

Similar efforts have been seen against Big Pharma in the fight against HIV and Aids, against munitions programmes, human rights abuses and genocide in Darfur and Israel. Fossil fuel divestment mirrors these efforts. As with all divestment efforts in the past, the potential of the divestment campaign may be dismissed as inconsequential in terms of its potential to make a real financial impact on the fossil fuel industry overall. However, financial impact is not the sole objective of divestment movements. Nor is it the only measure of success. Heightened awareness of, and massive social action against morally reprehensible behaviour; concerted action that has historically been shown to be highly effective in shaping public and policy discourse and ultimately in effecting a sea change in the policy environment is an important indicator of the effectiveness of the divestment movement.

***“Divestment can work in other ways than by leveraging economic pressure. It affects the broader societal debate, which is an important factor since there has been a political failure to address the issue as well as a market failure in pricing climate change risks into corporate stock prices. It is also a moral issue for institutions and individuals.”<sup>vi</sup>***

## HOW DOES DIVESTMENT WORK?

The principle behind how divestment works is that it will ultimately increase the cost of capital for target companies who are being divested from. This is based on the impact that a mass sale of shares will have on the share price of target companies and the resultant effect that this has on future returns. A declining share price will make capital more expensive, thus making it more difficult for companies to deliver an acceptable return on capital invested. Ultimately it means long-term capital-heavy projects will be harder to finance. See this rationale reflected in the diagram below:

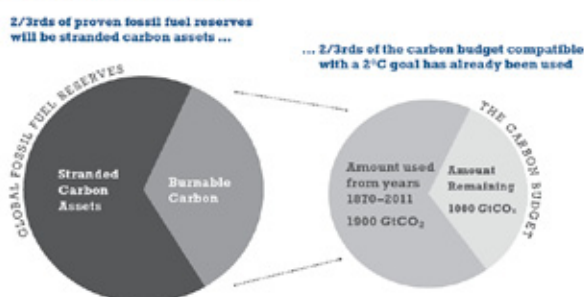


**Figure 1 How divestment works.** HSBC believes that the divestment movement “could end up hitting fossil fuel companies, putting their projects into a financial stranglehold. .... Less demand for shares and bonds ultimately increases the cost of capital to companies and limits the ability to finance expensive projects, which is particularly damaging in a sector where projects are inherently long term.”<sup>10</sup>

### WHY DO WE NEED A DIVESTMENT MOVEMENT?

Few still argue against the conclusions of science which confirm the planet has a carbon budget of approximately 900Gt CO<sub>2</sub> within which we must remain in order to have a significant (80%) chance of containing global warming within a 2°C “safety” zone. Taking account of emissions already produced, this leaves a budget of 565 Gt CO<sub>2</sub> for the remaining 40 years to 2050. However, current “proven” fossil fuel reserves held by publicly listed companies, if burned, would release around 762Gt CO<sub>2</sub>, far more than this budget would allow. Total estimated global reserves would release in excess of 2,795Gt CO<sub>2</sub> (see Figure 2 below). Logically it is not hard to accept therefore that a large proportion of fossil fuels have to remain unused.

Figure 2 Enforcing a 2° carbon budget<sup>11</sup>



Source: International Energy Agency, World Energy Outlook (2012); IPCC, “IPCC Fifth Assessment Report,” Limiting Climate Change High Level Session (2014); analysis by The Generation Foundation.

Figure 2: Appreciating the extent of “unburnable” carbon – the maths of the carbon bubble

Despite this scientific knowledge, significant ongoing capital expenditure is being committed to exploration, extraction and construction of

fossil fuel-based power infrastructure. To make matters worse, government subsidisation of the oil and gas industry continues unabated, whilst incentives to drive investment in low-carbon renewables at scale continue to lag significantly.<sup>11</sup> This “lunacy”<sup>12</sup> not only continues to threaten viability of the planet and the lives of billions, it reflects a serious misreading of demand, a waste of capex, a lack of financial discipline and a breach of fiduciary duty on the part of energy companies (and arguably the governments who incentivise them). Continued investment in fossil fuel based energy infrastructure will lock in a commitment to fossil fuel combustion, increasing global warming and related climate risks. And importantly, the risk to financial markets’ instability as a result of significant stranding of high-carbon assets and wasted capital put to their exploitation could result in a disorderly transition to the low-carbon future that must come about. The worst affected by the coming to bear of both climate and financial instability risks that result are the poor and least developed nations. Morally, ethically and financially it is more than evident that a move to drive divestment from such activities is essential.

***DID YOU KNOW that removing fossil fuel energy subsidies could reduce world GHG emissions by more than 6% in 2050 compared to business as usual, and contribute to improved economic efficiency in the countries undertaking the reforms?<sup>vii</sup>***



Globally, the fossil fuel divestment movement is the largest social movement that proactively seeks to curb the impacts of climate change by directly arresting the financial investment in its continuation. Based on now-accepted science that indicates continuing to burn fossil fuel is not a viable option if we want to secure planetary viability, the divestment movement highlights that fossil fuel companies, governments and financial institutions have the moral imperative to overcome political inertia, financial short-termism and vested fossil fuel interests – the “Toxic Triangle”<sup>13</sup> – of business as usual. The combination of these entrenched, co-dependent and negatively reinforcing issues have held back serious and committed moves towards mitigating the impacts of climate change. Premised on the belief that coordinated individual conviction can result in a mass movement, which drives forward the will and urgency to address the issue of global warming due to fossil fuel combustion, the divestment movement seeks to accelerate progress in this regard.

## THE COST OF CONTINUED DEPENDENCE ON FOSSIL FUELS

The costs of global warming are multifaceted and impact every sphere of human life – social, political, environmental and economic. Even a cursory analysis of known costs associated with the impacts of fossil fuel combustion can significantly demonstrate the logic of and need for divestment. The following discussion seeks to present an outline of the clear social and economic costs of continued dependence on fossil fuels, which support the call for divestment from carbon-based energy.

***“When climate change is framed as a health issue, rather than purely as an environmental, economic, or technological challenge, it becomes clear that we are facing a predicament that strikes at the heart of humanity.”<sup>viii</sup>***

## SOCIAL COSTS TO HEALTH AND WELLBEING

Whilst quantifying the relationship between greenhouse gas emissions, the consequent magnitude and rate of global warming and the specific impact that warming has on forcing climate change is difficult to determine with any accuracy, this difficulty does not negate either the existence of a relationship or the fact that there are significant social costs

that global warming and climate change are causing.

It is indisputable that fossil fuel driven global warming is causing climate change and that this has both direct and indirect impacts on people’s health and wellbeing (including the knock on effect on their productivity and therefore ultimately on economic growth). The increase in deaths as a result of airborne pollution, heatstroke and high temperatures, the increased incidence of natural disasters, droughts and floods and the related spread of diseases, famines, loss of land, homes and livelihoods that have been witnessed in the last two decades, are clear evidence of, and costs associated with fossil fuel-driven global warming.<sup>14</sup> In 2015, India reported 2500 deaths and Egypt reported 93 as a result of extreme heat, while countries in eastern and southern Africa are experiencing the worst drought since 1992.

Greater understanding of the specific pathways is not necessary in order to appreciate the incredible loss to health and wellbeing and to society at large that continued warming will make manifest in every sphere of life. This includes the increase in social and political instability, conflict and war which will establish a vicious cycle, increasing numbers of climate refugees, forcing climate-related migration, feeding the spread of xenophobia-related conflict and ultimately eroding the fabric of societies and wellbeing of communities the world over.

***“Divestment rests on the premise that it is wrong to profit from an industry whose core business threatens human and planetary health, bringing to mind one of the [Wellcome Trust] Foundation’s medical ethics – first, do no harm. We believe that, in aligning an organization’s investments with their aims and values, it goes beyond a “grand gesture”. The question is not only one of direct, short-term impacts, but of leadership.”<sup>ix</sup>***

Understanding the social, health and wellbeing costs of climate change and the need to drive an alternative future, more than 50 of the world’s leading doctors and academics presented the argument for divestment with particular clarity

in an open letter addressed to the Wellcome Trust Executive Board published in the Guardian newspaper<sup>15</sup>. Beyond the direct health costs related to climate impacts, there are also significant opportunity costs that are being lost as a result of not mitigating climate risks. Indeed, according to a report by the Lancet Commission (2015), the issue of tackling climate change “could be the greatest global health opportunity of the 21st century”.<sup>16</sup> Clean energy cook stoves and reduced air pollution alone would save millions in health care costs, not to mention increased productivity of the workforce.

Social costs associated with the burning of fossil fuels can be identified at a household, community and regional scale by the physical impacts in all of these arenas.<sup>17</sup> At the household scale specific reference is made to the poorest households that commonly use solid fuels for cooking and heating, thereby creating pollution pockets in the immediate area where members of the household spend the most time. Globally some 4% to 5% of diseases are attributed to this small-scale, but concentrated form of pollution.<sup>18</sup> Traditional cook stoves are estimated to account for 13% of global energy consumption and their toxic emissions responsible for the death of between 1.6 million people each year according to the World Health Organization.<sup>19</sup>

At a community scale, the collective release of fossil fuels into the surrounding atmosphere from both individuals and industry impacts on the long-term health of populations living within the immediate surrounds of these areas. In addition these levels are not always keeping within the urban health-related pollution guidelines. To compound this issue, it is diesel-fueled vehicles that are the highest emitters and which are also more commonly found in developing countries, thereby enhancing the inter-linkages between fossil fuel energy sources, global warming and vulnerability.<sup>20</sup>

### **DISTRIBUTIONAL COSTS EXACERBATE SOCIAL (AND ECONOMIC) INEQUALITY**

Perhaps of most concern to ethical and moral reasoning is the fact that the distributional impacts of climate change are not equitable. It is clear that the problem originates with the carbon emissions of the rich but the effects are felt most severely in the poorest countries of the tropics and the developing world. Indeed, at a regional and global scale the issue of fossil fuel emissions becomes more complex as there

are time lags in the impact of emissions and capacity differences in the ability to cope with these impacts. The continued and expanding reliance on fossil fuels for transport and energy will perpetuate and increase health impacts the world over, but the absolute cost will be higher in poor countries because of their relative lack of capacity to cope. Furthermore, developed countries already able and moving towards cleaner technologies, means that regional emissions – and therefore health-related impacts – will begin to drop.<sup>21</sup> Developing countries that are not supported financially to switch quickly to low-carbon solutions will be locked into a negative dependency.<sup>22</sup> This highlights the important issue of vulnerability in climate change impacts and should provide added motivation for developing countries – and the developed countries who have much to lose as a result of disasters and failures in developing country growth and stability – to act with immediacy.

Unfortunately, an understanding of the costs of non-mitigation for many developing countries is too easily dismissed by a narrow focus on the assumed “benefits” of economic growth and development: a benefits analysis that (consciously or not) does not take into account the increasingly strong evidence that climate impacts based on continued fossil fuel dependence will erode any development gains. Indeed, the OECD has estimated that not mitigating emissions quickly enough could result in a global GDP loss estimated to range between 0.7% to 2.5% by 2060.<sup>23</sup>

### **MORAL COSTS ARE EVIDENT IN THE CONTINUED EXPLOITATION OF DEVELOPING COUNTRIES**

Morally, the exploitative conduct associated with building reliance on an energy source, which will ultimately result in costs too expensive for developing countries to bear, is increasingly recognised to be both questionable and abhorrent. Despite this, Big Oil and Big Coal continue to argue that a reliance on fossil fuel as energy for development in many of the world's poorest countries is a human rights issue. Learning from the efforts of tobacco giants in the past, these big fossil fuel-based energy companies are driving sales to developing nations where the need for energy is high and carbon regulation weak or nonexistent. These companies argue that the overwhelming benefit of energy security and reliability for

development shadows any costs associated with climate impacts. By way of example, Exxon Mobil,<sup>24</sup> argues that there is a fundamental need for fossil fuels to help the world's poor attain development targets. During the 2014 Ebola outbreak, Peabody Energy went so far as to allude to an unfounded linkage between an investment in coal and the ability to distribute Ebola vaccines.<sup>25</sup> The claim highlights the skewed opportunistic thinking with regards to maintaining developmental trajectories, which rely on carbon investment and extraction.

***"I think there are much more pressing priorities that we... need to deal with. There are still hundreds of millions, billions of people living in abject poverty around the world. They need electricity... They need fuel to cook their food on that's not animal dung... They'd love to burn fossil fuels because their quality of life would rise immeasurably, and their quality of health and the health of their children and their future would rise immeasurably. You'd save millions upon millions of lives by making fossil fuels more available to a lot of the part of the world that doesn't have it."***<sup>x</sup>

**- Exxon CEO Rex Tillerson -**

With the decline in demand for coal in the US, big coal companies are similarly pursuing developing world markets. According to the Energy Information Administration (EIA) of the Department of Energy, US coal exports to China increased from nothing in 2007 to ten million tons in 2012, whilst exports to India increased from 1.5 million to seven million tons, and to South Korea from virtually nothing to nine million: cumulatively a jump of more than

1,000% in just three years.<sup>26</sup> In trying to justify behaviour, the World Coal Association (WCA) proposes that divestment "does not recognise the reality of growing energy demand, the continuing role of coal and the importance of technology in enabling coal use to be compatible with global efforts to reduce emissions."<sup>27</sup> The WCA goes on to emphasise the invaluable role that coal is playing in development as the fastest growing energy source with a significant contribution being made to building modern infrastructure.<sup>28</sup> Such infrastructure, it is argued, significantly contributes to economic growth and development and ultimately provides social benefits that more than outweigh climate change-related costs.

What is neglected by this argument is not only the fact that this infrastructure is likely to be stranded in the near future resulting in massive economic losses that will more than offset the gains, it also fails to consider the social, health and wellbeing costs and implications of fossil fuel dependence discussed earlier. Perhaps most importantly, the lack of consideration given to the opportunity costs and related benefits of foregoing the very real potential for developing economies to leapfrog the lessons of the developed world and centre their development programmes around low-carbon, clean energies is a travesty of justice. This includes a shift from centralized energy production towards diverse, clean energy models that hold particular promise for the creation of a more cost-effective and decentralized energy production. This would have the ability to reach more people: a critical consideration that should be given to developing world environments where accessibility to centralized infrastructure is unlikely to materialize for many or at any reasonable cost.<sup>29</sup> Shortcomings in service delivery and issues of aging infrastructure can be alleviated by diversified energy markets;





whilst local opportunities that both empower and enable local communities, thereby lifting the administrative burden of service provision and enabling capacity towards better governance, can be fostered with significantly greater ease.<sup>30</sup> Furthermore, if businesses, governments and society would recognise the potential overlap between the need for jobs and the provision of clean energy, these objectives could be addressed in a holistic way and not as two separate challenges.<sup>31</sup> Polin (2012) has demonstrated that spending money on green investments rather than on existing and aging infrastructure creates three times the amount of jobs.<sup>32</sup>

***“We must ... recognize that there is a humanitarian imperative to meeting [the developing world’s growing global energy needs.]”<sup>xi</sup>***

***- Exxon CEO Rex Tillerson -***

Undoubtedly, it is true that people and countries need energy to grow. To propose, however, that this energy should be based on fossil fuels proven to be resulting in the demise of the viability of the planet, and to attempt to hide profit motives in a humanitarian wrapper, is morally repugnant. It is evident that energy does not have to be fossil fuel-based: on the contrary, it is increasingly evident that it shouldn't be. Equally to portray fossil fuel-based energy as cheaper for developing world countries needing to stretch their budgets is entirely self-serving and disingenuous. The failure to internalize the cost of carbon-related destruction in the price of carbon is arguably the biggest failure of the market, one which developing world countries are already paying a significant price for. Thus whilst Exxon argues that markets rather than regulators should determine which technology should meet consumer needs,<sup>33</sup> this position can only be true if the value of carbon is appropriately linked to the full costs associated with its use.

The lack of proper pricing of carbon emissions is perhaps the biggest social and market failure in the world economy. It skews a full appreciation of the cost/benefit analysis and drives the continued use of fossil fuels. Such incomplete pricing inhibits acceptance of the very real evidence that fossil fuels are significantly more expensive and socially detrimental at full pricing, most especially when subsidies and related

political benefits are included.<sup>34</sup> Analysing the economic costs of not divesting from fossil fuels, especially in light of the mounting awareness of the impacts and costs of climate change, makes this particularly clear.

## **ECONOMIC COSTS – REAL AND POTENTIAL**

***“Climate change poses significant risks to the global and regional economies and to the portfolios of institutional investors that depend on economic stability and growth. Mitigating climate change is in the economic interests of investors, both to reduce systemic risks to their portfolios and to capture new investment opportunities in the necessary transition to a low-carbon, clean energy economy.”<sup>xii</sup>***

The potential economic costs related to continued investment in and by fossil fuel companies should be framed in the context of an increasingly imminent policy and regulatory environment that will ultimately render carbon assets unburnable and therefore valueless. This argument is well documented in Carbontracker's report, “Unburnable Carbon”<sup>35</sup> and has most recently been taken up by the Bank of England as posing a very real danger to the stability of financial markets across the globe.<sup>36</sup> The notion of the “carbon bubble” suggests that, whilst historically, an investment in carbon assets has provided a failsafe haven for capital as a result of widespread global reliance on fossil fuels for energy, the weight of evidence of the impact of carbon combustion today presents a rapidly evolving sea change in their ability to maintain this value. Accordingly, continued investment in fossil fuels is largely unjustifiable.

This presents a very real picture of a future wherein carbon assets are largely stranded assets.<sup>37</sup> With the realization that fossil fuels no longer have intrinsic value, investors will dump them in quick succession, with the potential to create a fossil fuel equivalent of the 2008 subprime crisis. Such a disorderly transition to a low-carbon future will result in a massive financial instability with concomitant knock on impacts for social and economic wellbeing and political stability. As with the 2008 financial crisis, the impact of, for example, a market crash will wipe out pension fund assets and

the retirement savings of millions of people, putting additional strain on governments and social welfare systems and spurring conflict and social disintegration. Surprisingly, the divestment movement is specifically criticized for its supposed potential to create such a disorderly financial crisis. Yet it is evident that the argument to divest from carbon assets represents a specific attempt to resolve an untenable situation and avoid the scenario that would result if divestment does not take place.

***“Fossil fuel companies have reserves more than four times the amount that can be burned if global warming is to be limited to 2°C and catastrophic effects avoided.... [and] companies are spending significant amounts annually to search for more. From an economic standpoint, an argument can be made that stocks are incorrectly priced because of that, and that exploration dollars ought to be invested elsewhere or returned to shareholders.”<sup>xiii</sup>***

Despite all the evidence, however, it remains fundamentally apparent that the majority of fossil fuel companies will not accept that a

carbon budget to restrict warming to 2° means that the world has come to the end of the fossil fuel age. Similarly, an insufficient number of institutional investors are accepting of this fact and voting with their share allocations accordingly. That is a major problem. And it is a problem worsened by the fact that policymakers, market regulators and legislators are still allowing coal companies to raise capital from public markets and list on stock exchanges without any mention of climate risks in their capital raising documents. The combined lack of acceptance and transparency in investment structures, as well as the maximization of short-term benefits has to be recognised as irresponsible fiduciary care, behaviour that will result in future economic dislocation for both individual investors and industries alike.

The short-termism intrinsic to the primary focus on profit and financial return above all else is one of the founding base points of the previously mentioned “Toxic Triangle”. This, it is argued, can only be achieved by accepting an exceptionally narrow definition of fiduciary duty but it is the notion of fiduciary duty to maximize financial returns for investors that is the rationale for arguing against the notion of divestment.





## SHORT-TERMISM AND SHORT-SIGHTEDNESS: JUSTIFYING A NARROW DEFINITION OF FIDUCIARY DUTY

Meeting fiduciary duty is a reoccurring argument used by investment professionals against divestment. Those currently responsible for investing significant capital on behalf of individuals (for example asset owners of pension funds) argue that they have the specific (one would believe sole) duty of ensuring that maximum (not necessarily optimal) financial returns accrue to their beneficiaries. As such, they believe they have a more vigilant responsibility towards the economic uncertainty of a divested portfolio over institutions such as universities.<sup>38</sup>

This view is used by asset owners, asset managers, institutional investors and financial intermediaries to reject or ignore consideration of the social and environmental consequences of continued investment in fossil fuels. The lack of proper pricing of CO<sub>2</sub> emissions adds to this behaviour, perpetuating the distortion and making it difficult for renewable energy investments to compete on the basis of financial returns, even though these investments would, in all likelihood, offer better financial returns if carbon risk premiums were fully incorporated in investment decisions, and would simultaneously address specific societal challenges. Unfortunately, investment pricing is not currently strong enough to direct investments to something that makes sense at a societal level, a problem that is amplified by corporate governance issues and the fact that the interests of fossil fuel company directors and managers are not necessarily aligned to the interest of investors.<sup>39</sup>

However, recognising that full carbon pricing is imminent, Carbontracker and many others are calling for project-based divestment from high cost, low value initiatives that will ultimately be mothballed or stranded, as well as for increased dividend payout of cash assets that the big oil, gas or coal companies would otherwise have allocated to exploration, research and development, and other no longer viable carbon intensive projects.<sup>40</sup> This argument recognizes that some carbon assets may have an important role to play in the economy in other ways, such as a raw material in the pharmaceutical industry, but that continued exploration and investment in carbon assets as fuel has to stop. The fact that

already known reserves are far more than those that can possibly be used, supports the call to stop (divest) from ongoing exploration of carbon as fuel.

This will assist in ensuring that an orderly divestment programme can occur and fossil fuel companies can partly protect the financial implications on both themselves and their investors by paying out dividends to shareholders and winding up unviable and expensive operations. In this way, the historical benefits derived by fossil fuel companies can realign to current and future realities and development imperatives.<sup>41</sup> The obvious problem with this is that by paying a bigger dividend, fossil fuel companies are committing to a trajectory of company reduction – away from growth, away from profits and away from short-term financial interests. This is contrary to the capitalist ethos and illustrates why efforts to address climate change demand powerful leadership, political and moral courage and a refusal to be swayed by vested interests.

## VESTED INTERESTS ARE CURRENTLY WINNING THE FIGHT TO MAINTAIN A HIGH CARBON STATUS QUO

***“The potential for innovations to accelerate the transition to a low-carbon economy is enormous, but there are real barriers, including the market scale, sunk costs and entrenched incentives for incumbent high-carbon technologies.”<sup>xiv</sup>***

The transition to low-carbon, renewable forms of energy represents a major challenge to the existing energy system and rises in the face of some of the most powerful actors – and their vested interests; actors who are intent on preserving the status quo at all costs. Perhaps unsurprising, but nonetheless disconcerting, is the fact that governments continue to subsidise these same fossil fuel companies, evidencing their own direct vested interests in maintaining a status quo or championing a short-term gain in contradiction to a long-term future. The fossil fuel industry, as with the tobacco giants in the past, has formidable lobbying power backed by substantial financial reserves, which unfailingly wins the backing of weak political leadership. This industry gains further support from government



policies that subsidise continued vested interests and the status quo. In this regard, a study by the International Monetary Fund calculated that pre-tax subsidies for fossil fuels in 2011 equaled \$480 billion.<sup>42</sup>

***“...subsidies provide incentives for inefficiently high levels of fuel consumption and that the associated fiscal costs can be detrimental to growth and poverty reduction. Eliminating subsidies will encourage more efficient energy consumption and thus reduce the impact of future international price increases on the economy. In addition, subsidy reform will contribute to fiscal sustainability and economic growth, which are crucial for sustained poverty reduction.”<sup>xv</sup>***

The logic of continuing to subsidise fossil fuel companies in the face of scientific evidence of the ultimate demise of social, environmental and economic value is inexplicable. Every sustainable development principle advocates for a transition to renewable, clean energy options. Every economic scenario points to the ultimate massive loss associated with a protracted delay to this transition. If subsidies were focused on renewable, clean energy sectors, an avenue of entrepreneurship and innovation could flourish. Even if subsidies weren't made available to

renewable energy, their removal from fossil fuel-based energy sources would result in immediate cost parity with renewable energy technologies – with only increasing upside for low-carbon solutions thereafter.

Innovation is central to sustainable growth and much potential lies in the “green economies”. Yet innovation is not driven by potential alone, it is also driven by demand and public policies.<sup>43</sup> Businesses will innovate when profits are in question. However with large and continued subsidization of investment targeting fossil fuel companies, incentives to innovate are misaligned and path dependency is perpetuated. Unless the cost of carbon is accurately priced into business models for fossil fuel companies, profits will not align to the innovation needed to move away from carbon-intensive energy sources and vested interests will continue to reap the benefits resulting from a lack of political action.

Indeed, many argue that the lack of movement to a decarbonised economy is primarily a political issue, that it requires a strong policy signal from governments across the globe to drive an active transition over the next five years with consistent support and direction provided by an enabling policy framework from governments.<sup>44</sup> Unfortunately at the apex of the toxic triangle we find political inertia and a lack of leadership undoubtedly supported by similar short-termism of focus on election cycles and vested interests of retaining power.



## POLITICAL INERTIA SITS AT THE TOP OF THE TOXIC TRIANGLE

***“To manage change and realize growth opportunities, clear and credible policies are needed to align expectations, guide investors, stimulate innovation, and avoid locking in to carbon-intensive infrastructure and behaviour.”<sup>xvi</sup>***

While markets could and should play a significant role in guiding and encouraging economic development, they are not assigned to play the role of protecting the common good of all people, especially those that are most vulnerable.<sup>45</sup> It is, in contrast, the explicit role of policy makers to ensure that appropriate protections are in place. Thus credible policies are needed to foster the transition to a low-carbon economy and to protect the future sustainability of people and planet.<sup>46</sup> As argued earlier, business and innovation is inspired by profit: if policies provide perverse incentives for profit generation through harmful behaviours such as continued fossil fuel dependence, they will not create the framework consistent with increased momentum towards a low-carbon future. Unfortunately, maintaining policies that support the current path dependence and system inertia will delay innovation and transition towards a “clean economy”, adding significant costs to the future. Furthermore, funding innovation in more effective carbon production rather than funding “clean” technology directly creates additional resistance to a shift towards low-carbon economies both politically and economically.<sup>47</sup> The global preoccupation with gas as an interim fuel, and the subsequent massive investment in fracking and related infrastructure, seems particularly likely to increase the resistance or, at a minimum, delay the committed transition to low-carbon solutions. Massive capital investment in fracking would supposedly earn long term financial returns and be better used to further low carbon transition. However, again this activity reflects the kind of short-termist thinking that does not – and politically it seems, need not – take account of the full environmental, social, health and natural resource costs that accrue with this activity. Maintaining energy as an economic commodity that is centralized in fossil fuels prevents a shift in the perception of what future sustainable

energy requirements entail as well as the outcome of who is to benefit the most.

***“Government has a role both in shifting the expectations (for example, by credibly committing to climate policy) or changing the initial conditions (for example, by investing in green infrastructure or funding clean energy research) in order to reduce the risk of clean technology investment and thereby help shift the economy to the low-emission pathway.”<sup>xvii</sup>***

Vested interests and business relationships with fossil fuel companies makes the argument for continued fossil fuel exploration and extraction on the premise of researching “cleaner” carbon a difficult issue to navigate. Not addressing path dependencies in policy formulation and funding efforts thus results in a delay of innovation in clean technology, entrenching further carbon-dependent behaviour.<sup>48</sup>

A clear signal from government is required if the path dependency of fossil fuels is to be broken.<sup>49</sup> Pre-emptive policy that takes into account the science of climate change and the rationale behind divestment, could guide behaviour towards responsible investment and strengthen the requirement for greater social and environmental accountability. Putting clear and unambiguous policies in place to set the parameters for emissions behaviour and guide market pricing appropriately will assist in ensuring that an orderly transition can occur.

Sadly, the need for political leadership is significantly greater in developing economies where vulnerability, poverty and socio-political unrest typically poses a significantly greater threat to stability and where a lack of resources, transparency and governance combined with market failures, vested interests, short-termism and corruption result in an unresponsive policy environment. South Africa's current socio-political climate and developmental path dependency illustrates the potential future failings of inaction and calls for policy-makers, investors, business and citizens alike to respond responsibly.

It is as a result of the absence of movement by both the private and public sectors that the Divestment Movement seeks to mobilize public opinion and mass action. Indeed, recognising

the entrenched and co-dependent barriers of the “Toxic Triangle”, the Divestment Movement’s effort is designed to compel mass action by common citizens, awakening them to their responsibility and to their power to demand leadership action that will reframe goals and development trajectories towards a just and sustainable future. The threat of a large-scale change in public opinion and the consequences of such change on both voting and financial behaviour are what will drive change in public and private sector actors seeking to maintain position through securing their proletariat and power in the future.

## **DIVESTMENT AS A STRATEGY IN COAL-DEPENDENT OR DEVELOPING ECONOMIES: IS IT VALID IN THE CASE OF SOUTH AFRICA?**

### **SOUTH AFRICA’S CARBON-INTENSIVE ENERGY CHALLENGE**

***“Future economic growth does not have to copy the high-carbon, unevenly distributed model of the past. There is now huge potential to invest in greater efficiency, structural transformation and technological change in three key systems of the economy.”<sup>xviii</sup>***

The South African economy is profoundly linked to the country’s rich mineral deposits, the mining and processing of which demand substantial energy resources directly contributing to the capital and energy intensive structure of the economy. Referred to as the “minerals and energy complex”<sup>50</sup>, this historical relationship has resulted in a “political, economic and institutional structure that lies at the heart of South Africa’s economy [creating] a fundamental structural challenge in moving towards a lower carbon economy”.<sup>51</sup> Without commitment from, or massive challenge to, the vested interests (including government) that still control resource and investment decisions today, policy will not translate into action.

Unfortunately, South Africa’s energy supply, which received insufficient maintenance and expansion investment for years, has become tenuous at best over the last decade with disastrous economic impacts on business and industry, with an estimated loss of R80 billion a month due to the country wide blackouts.<sup>52</sup>

This has not only critically constrained growth and development at a critical juncture in the country’s democratic transformation; it has limited government’s ability to meet service delivery promises and produced a knee jerk reaction to continue along the well-trodden path of coal-based energy. This mix of energy crisis, path dependence and a lack of compelling vision have resulted in more investment being poured into large scale coal-fired power stations at Medupi and Kusile, locking South Africa in to an emissions trajectory it cannot afford but quelling the urgent demand for energy for development in the near term. The economic costs of Medupi alone is 200% over the original budget, making the power station the most expensive coal powered station in the world, with the environmental and social costs still to be tallied.<sup>53</sup> In analyzing the carbon footprint of the two stations, the opportunity cost equates to R6.3 billion and R10.7 billion a year.<sup>54</sup>

***“Delaying action means locking in to technologies, infrastructures and behaviours that will be more costly to reverse or retrofit at scale later.”<sup>xix</sup>***

However, notwithstanding – or perhaps because of – energy challenges of the past decade, South Africa today has another, though different, energy crisis looming: one that will result from the significant increase of emissions associated with even more fossil fuel-based energy supply systems deployed to power growth and development. This “emissions-climate-energy crisis” stems from the structurally defining “energy-minerals complex” that remains active in South Africa today.

Considered alongside the “Toxic Triangle” and coupled with very real developmental, institutional and governance constraints, the nature of energy provision in South Africa adds to the wicked nature of the problem: one that is profoundly structural in nature and controlled by powerful vested interests which make it difficult to transform. Whilst the potential exists for renewable energy systems and technologies to come to the fore at this critical juncture, and indeed some (small) progress is being made in this regard, there is a high path dependency of the energy innovation system that has centred South Africa’s research and technological capability on fossil fuel technologies; a situation reinforced by the historic and entrenched monopolistic nature of energy service provision



in the country.<sup>55</sup> The consideration in recent years of fracking as an alternative before renewables reflects just how entrenched this path dependence remains and how perceived financial gain drives energy decisions.

At the core, then, South Africa's policy efforts must face the fundamental challenge of how to reconcile "sustainable development goals, such as mitigating greenhouse gases (GHGs), alleviating poverty and creating employment, with the current structure of the economy [and the nature of energy production systems]".<sup>56</sup> The issue is not whether South Africa can reduce its energy use whilst still achieving its development goals but rather how it can achieve its development goals whilst reducing energy emissions; how it can effectively decouple GHG emissions from energy provision or development. Hiding behind the excuse of poverty and a need for development is not a viable reason for honouring vested interests or pandering to political influence. Energy for development does not have to be cheap and dirty energy, especially in light of the increasing opportunity for cheap and clean energy technologies in developing world countries.

To date, despite widespread articulation and consensus of the absolute need to structurally transform the economy, the implications of actions necessary to achieve this end (dismantling the energy-minerals complex, retiring fossil fuel production plans, leaving assets in the ground, etc) has resulted in political paralysis and no fundamental implementation. How to steer the course through this political minefield of unpopular decisions, vested interests and private investor capital without losing socio-economic development gains, value or progress achieved to date is something that current leadership has not been willing to negotiate.

## A LOW-CARBON ECONOMY FOR SOUTH AFRICA IS THERE FOR THE TAKING

Logically, the sheer size and low density of Africa's scattered population points to the potential for effective use of decentralized, locally-accessible and economically cost-effective, clean energy initiatives over grid-based power. The opportunity of diversifying away from centralized energy production also presents social and financial opportunities for both developed and, more especially, developing countries. For example, cloud-based software

and pay as you go cell phone technology have helped micro-grid developments in Kenya's rural areas to overcome investment barriers and enabled increased energy access in remote communities.<sup>57</sup> Furthermore, the savings for households that renewable energy offers are considerable and the technological advances in, for example, LED lighting, result in reduced energy use (and therefore emissions) of five to ten times that of incandescent light.<sup>58</sup>

The assumption of development trajectories being dependent on fossil fuels is paradoxical by the obvious existing and ultimately increasing costs associated with such dependence. Technological abilities and social and economic benefits all support the "leap-frogging" of Africa over fossil fuel dependency and towards clean energy development. Just as was demonstrated by Africa's "leap-frogging" of telecommunications technology, renewable technology could enable African countries to "leap-frog" outdated, centralized grid infrastructure to get straight to clean energy economies.<sup>59</sup> Indeed, many parts of Africa and Asia are demonstrating this, despite the lack of strong policy enabler.<sup>60</sup>

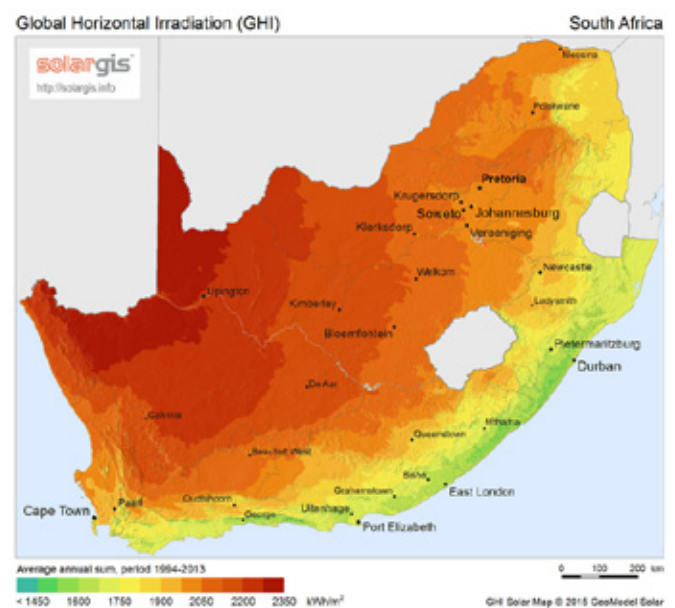


Figure 3. South Africa's solar potential.

In the case of South Africa, solar power makes up a small fraction of the energy mix despite the fact that the country is argued to have the best potential for concentrated solar power in the world<sup>62</sup>. The overwhelming evidence supports the view that investment in clean energy could not only help South Africa leapfrog past fossil fuel dependency but that it would significantly

fulfill social and political responsibility of poverty alleviation and sustainable development. Glaringly obvious too is the fact that intractable policies and intact vested interests are disabling the move towards a low-carbon future. Tipping the triangle to reverse these dynamics would enable significant progress towards a low-carbon future to be realised in a very short time frame.

## **TIPPING THE TRIANGLE: THE NEED FOR A DIVESTMENT MOVEMENT**

***“People of conscience need to break their ties with corporations financing the injustice of climate change.”<sup>xx</sup>***

Critics of the divestment movement argue that calm engagement with Big Oil and Big Coal, and the investors that support them, is likely to be significantly more fruitful and orderly in achieving the outcomes necessary to secure planetary sustainability. Initiatives such as ShareAction<sup>63</sup>, Carbon Tracker<sup>64</sup>, AODP<sup>65</sup>, CIEL<sup>66</sup>, UNPRI<sup>67</sup> and Client Earth<sup>68</sup> all seek to use engagement to empower expressions of individual investment agency through awareness and access to information. These initiatives are all, by and large, aligned to a similar outcome though this is presented as “responsible investment”. All ultimately seek to achieve a common goal with that of the divestment movement: a move away from a fossil fuel-dependent future.

Problematically, however, there are no benchmarks or yardsticks against which the progress of engagement action can be measured. There is currently no roadmap to guide how investors and/or NGOs can engage and no end goal or measurable indicator to determine whether engagement is having a desirable or sufficient impact. What precisely constitutes engagement, how to know if has been successful, and when it will achieve an objectively measurable outcome to meet the requirements of science and planetary necessity, are also not well defined. Perhaps most ironically for critics of divestment, successful engagement will amount to the same outcome – divestment from high-carbon projects. However, it is likely to happen over a protracted period and might not achieve the necessary outcome in time.

In contrast, the divestment movement seeks to mobilize civil society and ordinary citizens

to urgently stand up and challenge the lack of accountability, transparency, political will and above all, the lack of leadership to challenge and change the status quo, rid the socio-political order of elite vested interests, and demand a swift and just course of action towards a low-carbon future. It rests on the belief that the “Toxic Triangle” can be overturned by the collective power of individuals: a groundswell of individuals who have a vested interest in a sustainable future world order, a vested interest in their health, wellbeing and livelihoods. Most importantly it emphasizes immediate consequences of action that is too slow and too small.

***“Economies with accountable institutions and responsive policy frameworks will be better placed to adapt, evolve, embrace and manage change, to reallocate resources more efficiently, and to foster growth opportunities. They will have the flexibility to tap new markets and adopt new innovations. The alternative, of resisting change, protecting vested interests, propping up declining industries and delaying action, risks locking in less productive growth and leaving investors, firms and households vulnerable to shocks. Resisting change may enable economies to squeeze a little more out of their existing structure in the short-term, but it is unlikely to benefit them in the medium- to long-term.”<sup>xxi</sup>***

It is important to emphasise that the divestment movement does recognise the need for, and indeed advocates for, an orderly and just transition to a fossil fuel-free future. Appreciative of the fact that the transition towards a low-carbon economy could create a degree of “economic dislocation” that calls for the proactive involvement of companies and government,<sup>69</sup> there is an acute awareness of the fact that “tipping the toxic triangle” is not about transcending political and economical boundaries, but rather about reshaping them to encompass the reality of what measures are being needed to mitigate the impacts of climate change and at what pace.

Despite this understanding, it is apparent that political inertia remains a fundamental barrier,<sup>70</sup> perhaps the single most effective barrier that ultimately perpetuates financial short-termism and vested interests, inhibiting “right” action at scale. This demands that we find an answer to the question of “Where to from here? How can the “toxic triangle”, so powerfully entrenched in our modern socio-economic and political model of the world, be tipped?”

The role and potential power of the individual as a protagonist for change is paramount to answering this question. It is the basis of divestment movements across history. The power of divestment lies in the demand from people for change, it lies in the purchasing and political power that each of them ultimately holds, purchasing and political power that can act in concert to change the future. “Tipping the triangle” starts with a groundswell, a social movement that mobilizes the masses and demands a change to the social, political and economic order, not out of hysteria, but out of a response to science and social justice combined.

***“The divestment campaign has been important to bring focus to the issue. It has sent a strong message to the market and to policymakers that investors are concerned.”<sup>xxii</sup>***

Whilst superficial critics may respond to divestment as environmental activist hype, the trend towards greater awareness, the demand for increased corporate responsibility and accountability that is being driven by the divestment movement is accelerating. It is not purely an industry-focused, economic boycott. It is also about assigning responsibility to each and every stakeholder.

Consistent communication and “noise” generated by the movement for fossil fuel divestment and others on responsible investment, has the potential to tip the “Toxic Triangle”. It speaks to a lack of political will, a short-term focus in the minds of investors, of business and of governments. It demands engagement with the issue of continuing a world order based on fossil fuel combustion and highlights its ramifications, morally, socially, ethically, politically, financially and economically. It encompasses engagement but highlights the road to a lack of responsive ethical conduct to reasonable attempts to encourage correct

behaviour. It could be likened to the armed struggle of the ANC, to the last resort action of a populace whose peaceful negotiations were unheard and who, left without a voice in policy, in the markets, or in a sustainable future turned to strident action to achieve results.

## CONCLUSION

The science is steadfast. Global warming is accelerating with the continued combustion of fossil fuels as the most prevalent form of energy. The socio-economic costs associated with this are increasingly evident and their impact is particularly regressive. The future trajectory of investment flows will have a direct impact on the future of the world’s climate systems.<sup>71</sup> Opportunities for economic growth and improvement of social and ecological resilience can be realized through aggressively addressing climate change and mitigating further impacts. A change in path dependency from the assumed reliance on fossil fuels for development and growth is imperative as the short-term tradeoffs of continued fossil fuel investment become increasingly expensive in every conceivable sphere. These costs are further heightened in the context of exposed and vulnerable populations and the dynamics of unforeseen, runaway changes, which are increasingly no longer just an idle threat.<sup>72</sup>

Responsible investment behaviour can promote better governance, compliance – and perhaps even commitment to new opportunities on the part of business. However, the direction of policy and regulatory changes and the display of brave and bold political leadership could maximize opportunities for, and the progression towards a low-carbon green economy, as well as prevent those most vulnerable to the impacts of exploitive profiteering by big oil and coal companies. Putting the power of investment into the hands of stakeholders aligns the collective moral standing of these individuals to the investment seen to be most responsible. But as highlighted throughout this paper, the intertwined and co-dependent disablers of this necessary change are entrenched in current markets and policy behaviour. Therefore noise must be made and mass action must be taken to speak out and stand up to those in power.

Contrary to superficial criticisms, the call for divestment is inclusive of large measures of engagement and sensitive to the need for an economically-responsible transition. However,



the divestment movement also recognises that engagement without a powerful, immediate and urgent demand for action, without a timeframe, without a consequence, simply becomes empty conversation. It is argued here that the divestment movement is a rational and justifiable response to inaction. Undermining the importance of this argument by labeling it a hysterical reaction by anti-capitalist environmental activists reflects a grave misunderstanding of its purpose and of the urgency of its necessary outcome – a reallocation of capital away from fossil fuels to ensure a viable, sustainable future in a low-carbon economy. The divestment movement is, in fact, an essential protagonist for change; change that will secure a viable planetary future in the long term by avoiding short-termist gains.

## RECOMMENDATIONS

The following recommendations seek to promote the goal of a climate-resilient future; one that is common to both the divestment and engagement movements. They stem from an understanding of the critiques of the divestment movement and reflect an appreciation of the fact that the message of the divestment movement has been misunderstood – whether willfully or not. Each recommendation speaks to an element of the “toxic triangle” and strives to define the means through which an enabling environment for change can be created. Importantly, the final recommendation speaks to the need to more clearly recognise that there is a common goal shared by multiple and often disparate efforts that use engagement as a means to drive the transition to a low/no carbon future.

- 1. Overcome short-termism:** By adopting a long-term view of the future, business and investors have the opportunity to capitalize on a growing market for clean energy that is founded upon corporate sustainability, responsible investment and holistic fiduciary duty. Being champions in this regard has the potential to distinguish the “winners” from the “losers”.
- 2. Encourage responsible policy:** The political imperative to respond to climate impacts and mitigate increasing future vulnerabilities is absolute and must be proactively addressed by governments. Policies should be responsive, should address the drivers of global warming directly and be based on
- 3. Remove vested interests:** Removing subsidies and incentives, addressing market mispricing and leveling the playing field for innovative new technologies will significantly overcome vested interests by enabling capital to move to greater financial (and social) benefit.
- 4. Develop clear and comprehensive messaging suited to audience:** The divestment movement must counter efforts at misinformation and speak to audiences in the language they most readily understand. Making use of consistent, clear and easily accessible messaging, presented in simple, unemotional language will ensure that “hype” and “hysteria” cannot be attached to its communities. Furthermore messaging should clearly demonstrate the social, financial, individual and collective costs and consequences associated with not divesting and the benefits/opportunities of divestment.
- 5. Recognise common goals:** By demonstrating alignment between disparate engagement efforts, all of which hold divestment as the ultimate consequence for inaction, the divestment movement could illustrate that differences between engagement and divestment are more semantic and substantial. Increasing cooperation between these efforts could enable more meaningful outcomes to be achieved in a time frame that is meaningful for a climate agenda. Collaboration in the carbon cause is imperative for urgency to be met.



## ENDNOTES

1. Razouk, A. W. (June, 2014): <http://www.sindicatum.com/four-part-series-by-assaad-w-razouk-on-reviving-and-reinventing-the-global-climate-movement/>
2. Miller, H. (May, 2015). Divestor Asks: Is the Carbon Bubble a Form of Fraud?: [http://triplepundit.com/2015/05/divestment\\_investment\\_/](http://triplepundit.com/2015/05/divestment_investment_/)
3. UNPRI (2015). Deconstructing the divestment debate: <http://www.unpri.org/events/deconstructing-the-divestment-debate/>
4. United Nations Development Programme, World Energy Assessment (2000) <http://www.undp.org/content/dam/aplaws/publication/en/publications/environment-energy/www-ee-library/sustainable-energy/world-energy-assessment-energy-and-the-challenge-of-sustainability/World%20Energy%20Assessment-2000.pdf>.
5. Kasperson, R.E., E. Archer, D. Caceres, K. Dow, T. Downing, T. Elmqvist, C. Folke, G. Han, K. Iyengar, C. Vogel, K. Wilson & G. Ziervogel. (2005). Vulnerable Peoples and Places. (Eds) Hassan R, Scholes R and Ash N. Ecosystems and Human Well-being; Millennium Assessment Report: Current State and Trends. Washington D.C.: Island Press.
6. Oxfam Briefing Paper (2014). Food, Fossil Fuels and Filthy Finance. [https://www.oxfam.org/sites/www.oxfam.org/files/file\\_attachments/bp191-fossil-fuels-finance-climate-change-171014-en.pdf](https://www.oxfam.org/sites/www.oxfam.org/files/file_attachments/bp191-fossil-fuels-finance-climate-change-171014-en.pdf)
7. Bandura, A. (1999). Moral disengagement in the perpetration of inhumanities. *Personality and Social Psychology Review*. [Special Issue on Evil and Violence], 3, 193-209: <http://www.uky.edu/~eushe2/Bandura/Bandura1999PSPR>
8. Ibid
9. Ibid
10. Yeo, S. (April, 2015). Four ways to divest from fossil fuels: The Carbon Brief. [http://www.carbonbrief.org/blog/2015/04/hsbc-outlines-four-ways-to-divest-from-fossil-fuels-\(1\)/](http://www.carbonbrief.org/blog/2015/04/hsbc-outlines-four-ways-to-divest-from-fossil-fuels-(1)/)
11. Carrington, D (May, 2015). <http://www.theguardian.com/environment/2015/may/18/fossil-fuel-companies-getting-10m-a-minute-in-subsidies-says-imf>; Elliot, L (September 2015). <http://www.theguardian.com/environment/2015/sep/21/oecd-nations-200bn-subsidies-fossil-fuels-climate-change>.
12. Campanale, M (July, 2015) Founder of the Carbontracker Initiative. Personal communication.
13. Oxfam Briefing Paper (2014). Food, Fossil Fuels and Filthy Finance. [https://www.oxfam.org/sites/www.oxfam.org/files/file\\_attachments/bp191-fossil-fuels-finance-climate-change-171014-en.pdf](https://www.oxfam.org/sites/www.oxfam.org/files/file_attachments/bp191-fossil-fuels-finance-climate-change-171014-en.pdf)
14. The Lancet (June, 2015). Health and climate change: policy responses to protect public health: [www.thelancet.com/commissions/climate-change-2015](http://www.thelancet.com/commissions/climate-change-2015); <http://www2.epa.gov/cleanpowerplan/learn-about-carbon-pollution-power-plants>; <https://www.ec.gc.ca/indicateurs-indicateurs/default.asp?lang=En&n=D4C4DBAB-1>
15. The Guardian (June, 2015). Do no harm: the Wellcome Trust should not profit from the fossil fuel industry: <http://www.theguardian.com/environment/2015/jun/25/do-no-harm-wellcome-trust-should-not-profit-from-fossil-fuel-industry>
16. The Lancet (June, 2015). Health and climate change: policy responses to protect public health: <http://www.thelancet.com/commissions/climate-change-2015>
17. Ibid
18. Ibid
19. Razouk, A. W. (June, 2014): <http://www.sindicatum.com/four-part-series-by-assaad-w-razouk-on-reviving-and-reinventing-the-global-climate-movement/>
20. Ibid
21. Ibid
22. Ibid
23. Dellink, R. et al. (2014), "Consequences of Climate Change Damages for Economic Growth: A Dynamic Quantitative Assessment", OECD Economics Department Working Papers, No. 1135, OECD Publishing <http://dx.doi.org/10.1787/5jz2bxb8kmf3-e>
24. Exxon website: <http://corporate.exxonmobil.com/>
25. Goldenberg, S. (2015). The Guardian: <http://www.theguardian.com/environment/2015/may/19/peabody-energy-exploited-ebola-crisis-for-corporate-gain-say-health-experts>.
26. Klare, M (April, 2014). Big Oil Won't Let Developing World Kick the Habit: <http://www.motherjones.com/environment/2014/05/big-energy-developing-country-oil-exxon-coal>
27. World Coal Association (WCA). Coal Matters: Divestment and the Future Role of Coal: <http://www.worldcoal.org/resources/coal-statistics/coal-matters/>
28. Ibid
29. Lenferna, A. (April, 2015). Why Africa Should Join the Divestment Movement: <http://www.thoughtleader.co.za/mandelarahodesscholars/2015/04/29/why-africa-should-join-the-fossil-fuel-divestment-movement/>
30. Examples of decentralised energy schemes in under capacitated areas: <http://practicalaction.org/decentralised-energy/>; [http://www.ruralelec.org/fileadmin/DATA/Documents/O6\\_Publications/ARE-Best-Practice-Africa-2014\\_final.pdf](http://www.ruralelec.org/fileadmin/DATA/Documents/O6_Publications/ARE-Best-Practice-Africa-2014_final.pdf); [http://www.greenpeace.org/africa/global/africa/publications/climate/renewableenergyreport\\_poweringthefuture.pdf](http://www.greenpeace.org/africa/global/africa/publications/climate/renewableenergyreport_poweringthefuture.pdf)
31. Fulton, M & Capalino, R. (2014). Investing in the Clean Trillion: Closing the Clean Energy Gap: <http://www.ceres.org/resources/reports/investing-in-the-clean-trillion-closing-the-clean-energy-investment-gap>
32. Polin, R. (2012). Getting Real on Jobs and the Environment: Pipelines, Fracking or Clean Energy: [http://www.peri.umass.edu/fileadmin/pdf/other\\_publication\\_types/magazine\\_journal\\_articles/Pollin--Getting\\_Real\\_on\\_Jobs-Environment---NLF\\_9-12.pdf](http://www.peri.umass.edu/fileadmin/pdf/other_publication_types/magazine_journal_articles/Pollin--Getting_Real_on_Jobs-Environment---NLF_9-12.pdf)
33. Exxon Mobil. ExxonMobil's views and principles on policies to manage long-term risks from climate change: <http://corporate.exxonmobil.com/en/current-issues/climate-policy/climate-policy-principles/overview>
34. According to the IEA, global fossil fuel consumption subsidies are almost 6 times higher than global renewable subsidies. [http://instituteeforenergyresearch.org/analysis/developing-countries-subsidize-fossil-fuel-consumption-creating-artificially-lower-prices/#\\_edn4](http://instituteeforenergyresearch.org/analysis/developing-countries-subsidize-fossil-fuel-consumption-creating-artificially-lower-prices/#_edn4)
35. Carbon Tracker Initiative. Are the world's financial markets carrying a carbon bubble?: <http://www.carbontracker.org/wp-content/uploads/2014/09/Unburnable-Carbon-Full-rev2-1.pdf>
36. Carbon Tracker Initiative (2013). Unburnable Carbon: Wasted capital and stranded assets: <http://carbontracker.live.kiln.it/Unburnable-Carbon-2-Web-Version.pdf>
37. The word "largely" seeks to clarify that use of some carbon assets in applications other than as fossil fuel is undoubtedly going to continue into the future where alternatives are not yet identifiable. This includes, for example, use of oil in pharmaceuticals etc.
38. Stracke, D.; Martin, A. and Malchenko, M. (2014). Seattle City Employment Retirement System, Fossil Fuel Divestment. NEPC, USA.
39. UNPRI (2015). Deconstructing the divestment debate: <http://www.unpri.org/events/deconstructing-the-divestment-debate/>
40. Ibid
41. Ibid
42. The Unequal Benefits of Fuel Subsidies: A Review of Evidence for Developing Countries Javier Arze del Granado, David Coady, and Robert Gillingham
43. Carbon Trust (June, 2015). Titans or Titanics? Understanding the business response to climate change and resource scarcity: <http://www.carbontrust.com/resources/reports/advice/titans-or-titanics>
44. The Lancet (June, 2015). Health and climate change: policy responses to protect public health: <http://www.thelancet.com/commissions/climate-change-2015>
45. America: The National Catholic Review (April, 2014). Getting out of oil: <http://americamagazine.org/issue/getting-out-oil>
46. The New Climate Report Economy Report (2014): <http://newclimateeconomy.report/>

47. Aghion, P., Hepburn, C., Teytelboym, A. and Zenghelis, D. (November, 2014). Path dependence, innovation and the economics of climate change. Centre for Climate Change Economics and Policy Grantham Research Institute on Climate Change and the Environment, a contributing paper to the New Climate Economy: <http://newclimateeconomy.report/wp-content/uploads/2014/11/Path-dependence-and-econ-of-change.pdf>
48. Ibid
49. Ibid
50. Winkler, H., & Marquard, A. (2009). Changing development paths: From an energy-intensive to low-carbon economy in South Africa. *Climate and Development*, 1(1), 47–65.
51. National Planning Commission (2011). National Development Plan: Vision for 2030. National Planning Commission. Pretoria. P.181.
52. <http://businesstech.co.za/news/general/83429/eskom-blackouts-cost-south-africa-r80-billion-per-month/>
53. <http://www.terrafirma-academy.com/the-most-expensive-coal-power-station-in-the-world/>
54. Blignaut, J. (2012). Climate Change: The opportunity cost of Medupi and Kusile power stations. *Journal of Energy in Southern Africa*. Vol. 23. No. 4.
55. Pegels, A. (2010). Renewable energy in South Africa: Potentials, barriers and options for support. *Energy Policy*, 38(9): 4945–4954.
56. Winkler, H., & Marquard, A. (2009). Changing development paths: From an energy-intensive to low-carbon economy in South Africa. *Climate and Development*, 1(1), 47–65.
57. [http://www.ashden.org/files/case\\_studies/SteamCo2C%20Kenya.pdf](http://www.ashden.org/files/case_studies/SteamCo2C%20Kenya.pdf)
58. Popov, J. (March, 2014). Can Africa Leapfrog the Energy Age?: <http://www.aljazeera.com/indepth/opinion/2014/03/can-africa-leapfrog-carbon-ener-201433114400319289.html>
59. African Development Bank Group (May, 2013). Technology Can Help Africa Leap-Frog Development Challenges: <http://www.afdb.org/en/news-and-events/article/technology-can-help-africa-leap-frog-development-challenges-11840/>
60. Examples: [http://www.ashden.org/files/case\\_studies/SRSP%20Pakistan.pdf](http://www.ashden.org/files/case_studies/SRSP%20Pakistan.pdf); <http://www.ashden.org/files/Azuriwinner.pdf>; <http://www.ashden.org/files/Aprovecho2006.pdf>; <http://www.ashden.org/files/ToughStuff%20winner.pdf>; [www.economist.com/news/middle-east-and-africa/21653618-falling-cost-renewable-energy-may-allow-africa-bypass](http://www.economist.com/news/middle-east-and-africa/21653618-falling-cost-renewable-energy-may-allow-africa-bypass)
61. [https://en.wikipedia.org/wiki/Solar\\_power\\_in\\_South\\_Africa](https://en.wikipedia.org/wiki/Solar_power_in_South_Africa)
62. [https://en.wikipedia.org/wiki/Solar\\_power\\_in\\_South\\_Africa](https://en.wikipedia.org/wiki/Solar_power_in_South_Africa)
63. [www.shareaction.org](http://www.shareaction.org)
64. [www.carbontracker.org](http://www.carbontracker.org)
65. [www.aodproject.net](http://www.aodproject.net)
66. [www.cielgroup.com](http://www.cielgroup.com)
67. [www.UNPRI.org](http://www.UNPRI.org)
68. [www.clientearth.org](http://www.clientearth.org)
69. Fulton, M & Capalino, R. (2014). Investing in the Clean Trillion: Closing the Clean Energy Gap: <http://www.ceres.org/resources/reports/investing-in-the-clean-trillion-closing-the-clean-energy-investment-gap>
70. Oxfam Briefing Paper (2014). Food, Fossil Fuels and Filthy Finance. [https://www.oxfam.org/sites/www.oxfam.org/files/file\\_attachments/bp191-fossil-fuels-finance-climate-change-171014-en.pdf](https://www.oxfam.org/sites/www.oxfam.org/files/file_attachments/bp191-fossil-fuels-finance-climate-change-171014-en.pdf)
71. The New Climate Economy, Executive Summary (2014): [http://newclimateeconomy.report/wp-content/uploads/2014/08/NCE\\_ExecutiveSummary.pdf](http://newclimateeconomy.report/wp-content/uploads/2014/08/NCE_ExecutiveSummary.pdf)
72. The New Climate Economy Report, Chapter 5 (2014). Economics of Change: A framework for Growth: <http://newclimateeconomy.report/economics-of-change/>
- iii. Davidson, C. and Kaufman, C., (23 January 2015) Is reinvestment a good strategy for the fossil fuel divestment movement? Truthout <http://truth-out.org>
- iv. <http://gofossilfree.org/whatisdivestment/>
- v. Carbon Tracker Initiative. Gone Fishing: Divestment & Engagement: [http://www.carbontracker.org/divestment\\_engagement/](http://www.carbontracker.org/divestment_engagement/)
- vi. Powell, A.(November,2014) From Divestment to Engagement: Harvard Gazette: <http://news.harvard.edu/gazette/story/2014/11/fromdivestmenttoengagement/>
- vii. Organisation for Economic Co-operation and Development (2013). OECD Work on Climate Change 2013 – 2014: Pg. 8: [http://www.oecd.org/env/cc/Work-on-Climate-Change-2013-14\\_web.pdf](http://www.oecd.org/env/cc/Work-on-Climate-Change-2013-14_web.pdf)
- viii. World Energy Assessment: <http://www.undp.org/content/dam/aplaws/publication/en/publications/environment-energy/www-ee-library/sustainable-energy/world-energy-assessment-energy-and-the-challenge-of-sustainability/World%20Energy%20Assessment-2000.pdf>
- ix. The Guardian (June, 2015). Do no harm: the Wellcome Trust should not profit from the fossil fuel industry: <http://www.theguardian.com/environment/2015/jun/25/do-no-harm-wellcome-trust-should-not-profit-from-fossil-fuel-industry> <http://www.theguardian.com/environment/2015/jun/25/do-no-harm-wellcome-trust-should-not-profit-from-fossil-fuel-industry>
- x. Klare, M (April, 2014). Big Oil Won't Let Developing World Kick the Habit: <http://www.motherjones.com/environment/2014/05/big-energy-developing-country-oil-exxon-coal>
- xi. Ibid
- xii. Fulton, M & Capalino, R. (2014). <http://www.ceres.org/resources/reports/investing-in-the-clean-trillion-closing-the-clean-energy-investment-gap>
- xiii. Powell, A.(November,2014) From Divestment to Engagement: Harvard Gazette: <http://news.harvard.edu/gazette/story/2014/11/fromdivestmenttoengagement/>
- xiv. The New Climate Economy Report, Chapter 7 (2014). Transformation Through Innovation: <http://newclimateeconomy.report/innovation/>
- xv. Arze del Granado, J., Coody, D., and Gillingham, R. (2010) The Unequal Benefits of Fuel Subsidies: A Review of Evidence for Developing Countries. IMF Working Paper, Fiscal Affairs Department.
- xvi. The New Climate Economy Report, Chapter 5 (2014). Economics of Change: A framework for Growth: <http://newclimateeconomy.report/economics-of-change/>
- xvii. Aghion, P., Hepburn, C., Teytelboym, A., and Zenghelis, D. (November 2014). Path dependence, innovation and the economics of climate change. Centre for Climate Change Economics and Policy. Grantham Research Institute on Climate Change and the Environment. [http://www.lse.ac.uk/GranthamInstitute/wpcontent/uploads/2014/11/Aghion\\_et\\_al\\_policy\\_paper\\_Nov20141.pdf](http://www.lse.ac.uk/GranthamInstitute/wpcontent/uploads/2014/11/Aghion_et_al_policy_paper_Nov20141.pdf)
- xviii. The New Climate Economy, Executive Summary (2014): [http://newclimateeconomy.report/wp-content/uploads/2014/08/NCE\\_ExecutiveSummary.pdf](http://newclimateeconomy.report/wp-content/uploads/2014/08/NCE_ExecutiveSummary.pdf)
- xix. Aghion, P., Hepburn, C., Teytelboym, A., and Zenghelis, D. (November 2014). Path dependence, innovation and the economics of climate change. Centre for Climate Change Economics and Policy. Grantham Research Institute on Climate Change and the Environment. [http://www.lse.ac.uk/GranthamInstitute/wpcontent/uploads/2014/11/Aghion\\_et\\_al\\_policy\\_paper\\_Nov20141.pdf](http://www.lse.ac.uk/GranthamInstitute/wpcontent/uploads/2014/11/Aghion_et_al_policy_paper_Nov20141.pdf)
- xx. Tutu, D (2014): <http://www.theguardian.com/commentisfree/2014/apr/10/divest-fossil-fuels-climate-change-keystone-xl>
- xxi. The New Climate Economy Report, Chapter 5 (2014). Economics of Change: A framework for Growth: <http://newclimateeconomy.report/economics-of-change/>
- xxii. Reynolds, F. (2015). In Grene, S article: Divestment Refuseniks May Yet Save the Planet: <http://www.ft.com/intl/cms/s/0/da6bb79ad87611e48a6800144feab7de.html#axzz3f1N90eM0>

## QUOTE REFERENCES:

- i. Davidson, C. and Kaufman, C., (23 January 2015) Is reinvestment a good strategy for the fossil fuel divestment movement? Truthout <http://truth-out.org>.
- ii. Powell, A.(November,2014) From Divestment to Engagement: Harvard Gazette: <http://news.harvard.edu/gazette/>





## ABOUT 350AFRICA.ORG

We are part of a million-people strong global climate movement that campaigns through grassroots organising and mass public actions in 188 countries. The number 350 means climate safety: to preserve a liveable planet, scientists tell us we must reduce the amount of CO<sub>2</sub> in the atmosphere from its current level of 400 parts per million and rising, to below 350 ppm.

Climate change will hit Africa hardest so this fight is about climate justice. Many of the poorest Africans, in particular, women and children are already facing more drought, floods and extreme weather that threaten their livelihoods and push food prices up. The fact is climate change is going to affect all of us.

We believe that an African grassroots movement can hold our leaders accountable to the realities of science and the principles of climate justice. That movement is rising from the bottom up all over the continent and is coming together to champion solutions that will ensure a better future for all.

## ABOUT FOSSIL FREE AFRICA

South Africa's dirty banks are greenwashing their work while funding Africa's growing addiction to fossil fuels at the same time. Behind closed doors, banks like Nedbank are financing massive coal power stations, oil refineries and drilling rigs. This contributes to climate change, uses and pollutes huge amounts of scarce water and affects people's health.

As part of the global divestment movement, the Fossil Free Africa campaign is calling on banks like Nedbank to stop funding future fossil fuel projects and for people of conscience, universities and faith based organisations to commit to divesting from coal and oil.

## CONTACT

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