Open Analysis Addressing Slavery in Supply Chains

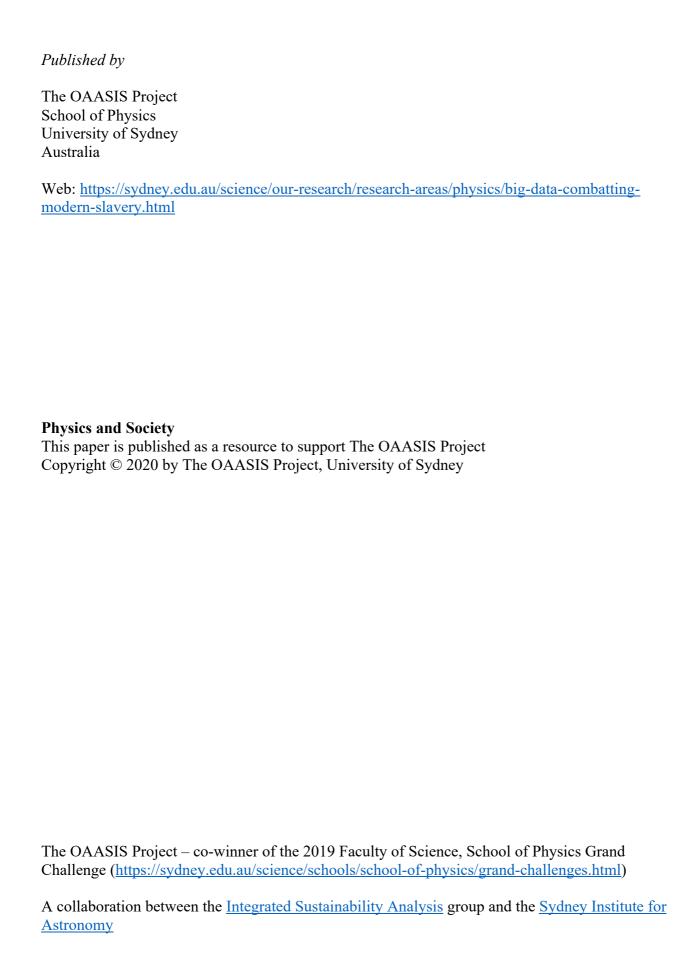


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Modern Slavery, Inequality and Greenhouse Gas Emissions: The complex system of climate change

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An ISA SIfA Production

Modern Slavery, Inequality and Greenhouse Gas Emissions: The

complex system of climate change

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Abstract (150 words)

The link between inequality, modern slavery and climate change is starting to be recognised – it's a

vicious cycle: climate change is fuelled by inequality, which in turn fuels climate change.

Individuals with a large share of global wealth have power to influence legislation and investments

that often result in unsustainable decision-making. These decisions indirectly fuel climate change

that often leads to wide-ranging weather events (such as floods, drought), which primarily affect

low-income communities, rendering them vulnerable to various forms of exploitation (a

manifestation of modern slavery). Despite the evident linkages between modern slavery and climate

change, these issues are still addressed in isolation. In this note, we present a comprehensive

comparison of the global response to assessing, monitoring and reporting on emissions with the

global response to modern slavery. We comment on the current state of affairs; and provide

suggestions for facilitating positive change.

Keywords: modern slavery, climate change, inequality, emissions

Introduction

On January 1st, 2019 Australia's Modern Slavery Act came into force (Australian Government, 2018) making Australia only the second country to report after the UK. Compare this with global reporting on greenhouse gas emissions (GHG), which began around 1990 following a growing understanding of their role in climate change (Sawyer, 1972) (National Oceanic and Atmospheric Administration, 1974). Had we understood earlier the role of inequality and its extreme manifestation, modern slavery, in accelerating climate change we may have acted sooner. However, the link has only recently been explored (Islam & Winkel, 2017). It suggests that climate change is fuelled by inequality. Wealthy individuals and organisations with vested interests in the status quo, such as fossil fuel extraction and use, are able to influence government legislation and public opinion on climate change. They can skew elections. Even in democratic nations people with vast wealth are able to outspend political parties and influence election results (Smee, 2019) (Hamilton & Kells, 2019). Directly or indirectly they fuel climate change. With governments around the world fostering a system that sees the richest 1% holding over 50% of global wealth (Fig 1) the rich have been allowed to exploit the poor (Alsamawi, Murray, & Lenzen, 2014) as well as the planet, donating large amounts of money to climate denier organisations (Hayhoe, 2017), buying influence to support their interests against those of the rest of the world (Brulle, 2018).

Share of global wealth 2010-2015

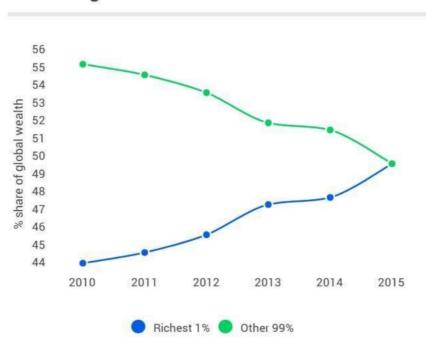


Fig. 1 Share of global wealth. The richest 1% hold over 50% of the global wealth. Source: (Gray, 2016)

Inequality in turn is fuelled by climate change (Diffenbaugh & Burke, 2019). Climate change increasingly manifests in severe weather events, which disproportionately impact the Global South (Samson, Berteaux, McGull, & Humphries, 2011). These events disrupt livelihoods and can lead to climate-driven migration and risks of trafficking. The International Organization for Migration (IOM) (Coelho, 2016) for example has documented strong links between climate disruption in Peru and Bolivia and human trafficking. And Boyd and colleagues (2018) link destruction of rainforest with loss of livelihood for local communities and hence vulnerability to modern slavery.

These victims of modern slavery are doubly punished, working in toxic conditions, which in turn exacerbate climate change. For example, Greenpeace (2012) reports that much of the pig iron

industry in Brazil is fuelled by charcoal made by slave labour in the rainforest of the north eastern Amazon. It's a similar story in the brick kilns stretching across Pakistan, northern India, Nepal and Bangladesh where forest wood fuels the kilns and where up to 250,000 children are thought to work in Pakistan alone (Tahir & Refique, 2009) (Boyd, et al., 2018). As David Brown at University of Nottingham's Rights Lab says: "If slavery were a country, it would have a population of some 46 million and the gross domestic product (GDP) of Angola, yet it would be the third largest emitter of CO2 ... in the world." (Brown, 2018, p. 4). Which not only provides a stark picture of emissions related to modern slavery but also brings us back to inequality. Modern slavery is big business (Banerjee, 2020).

The World Bank estimates the 2018 GDP of Angola to be around US\$106bn. It's easy to see how the revenue from modern slavery might equal this sum. For example a 2010 report from the Organization of Security and Co-operation in Europe (Aronowitz, Theuermann, & Tyrurykenova, 2010) estimated that sexual exploitation can generate a return on investment of between 100% and 1000%, while an enforced labourer can generate around 50%. These profits, via money laundering predominantly through the banking and gaming sectors (Butler, 2019) (Australian Government, 2019), find their way back into the system and hence further increase inequality (Australian Government, 2011). Big profits can lead to excessive consumption and directly or indirectly support fossil fuel extraction and use, further accelerating climate change – which in turn brings extreme weather disproportionately affecting the poor, rendering them vulnerable to modern slavery. And so the cycle continues; and judging from the trajectories of modern slavery and ghg emissions it seems we have created ever-accelerating feedback loops.

For these reasons, inequality¹ and its extreme manifestation, modern slavery, need to be understood as well and addressed as seriously as climate change and GHG emissions.

Below we compare the global response to assessing, monitoring and reporting on emissions with the global response to modern slavery, comment on their respective success, or lack thereof, and suggest some potential areas for change in the approach to modern slavery that in turn could perhaps help address climate change. However, with modern slavery embedded in current business practices unlikely to be relinquished easily (Banerjee, 2020) and emissions rising steadily despite long term reporting, monitoring and remedial action, this is hardly an optimistic story. As Banerjee concludes, if we are to eradicate modern slavery the business model needs to change but, he says, "I for one will not be holding my breath" (Banerjee, 2020).

Reporting on GHG emissions and climate change²

The UN Conference on the Human Environment, Stockholm, 1972, was the first international stocktake on human impacts on the environment (Boudes, 2014). It laid the foundation for global governance of the environment and led to the UN Environment Program (UNEP) to coordinate sustainability efforts (Mingst, 2013). In 1988 the UNEP with the World Meteorological Organisation (WMO) established the Intergovernmental Panel on Climate Change (IPCC) to review knowledge of the science of climate change and its likely social and economic impacts, and to recommend response strategies (Intergovernmental Panel on Climate Change (IPCC), n.d.).

Four years later came the UN Framework Convention on Climate Change (UNFCCC)³, an international treaty that opened for ratification at the 1992 Earth Summit in Rio. Its aim was to help governments stabilize GHG emissions to prevent dangerous interference with the climate. Leading up to the Summit, the UN had established the Greenhouse Gas Inventory and had begun collecting

¹ We use *modern slavery* as the headline indicator for *inequality* just as *GHG emissions* is used as the headline indicator for *climate change*. All four terms will appear throughout the paper.

² See Appendix one for a comparison of developments of emissions reporting and modern slavery reporting

³ https://unfccc.int/

emissions data from participating countries. Collection of national data was supported with scientific guidance from the IPCC⁴ and later standardised in the *Guidelines for National Greenhouse Gas Inventories* (1996). Further guidance was issued in 2000⁵, 2003⁶, 2006⁷, and 2013⁸. Data collection was further supported by the UN Statistics Division, through its integration of environmental and economic accounting. It published its Integrated Environmental and Economic Accounting Framework in 1993 (UN, 1993) with an update in 2014_(UN, 2014). Thus, the quantification of emissions, regular collection of data at business, state and global level, regular reporting, the tracking of emissions over time and the linking of environmental and economic data in a single framework, became part of everyone's business.

Representatives from 172 governments participated in the Rio Earth Summit in 1992⁹ with 17,000 people attending the parallel NGO Forum. The ten day meeting culminated in The Rio Declaration which consisted of 27 principles including Principle 10 stating that "[e]nvironmental issues are best handled with the participation of all concerned citizens, at the relevant level" (UNEP, 2016). The principle went on to say that individuals should have 'appropriate access to information' on the environment. The action plan, Agenda 21, arising from the 27 principles included a Local Authorities' (LAs') initiative (UN, 1992) calling for the participation of LAs worldwide in protecting the environment. Consequently, many LAs adopted Agenda 21 supported by the International Council for Local Environmental Initiatives (ICLEI) (1996). Thus, the language of environmental protection became part of the lexicon in cities and communities worldwide.

The Rio Declaration also enshrined the term 'sustainable development' in the language of business and governments. Principle 12 calls for open economic systems leading to 'economic growth and sustainable development in all countries' 10. The World Business Council for Sustainable Development (WBCSD) was founded in 1990 with the specific remit to "spread the concept of sustainable development among the world's business leaders and companies ahead of the summit" 11. Since then *sustainable development* has come to imply *emissions reductions*, enshrined by the Kyoto Protocol in 2005 committing its 55 Parties to the Convention 12 to reduction targets, and recently reinforced by the 2019 Paris agreement ratified by 187 Parties 13. Today business leaders around the world, recognising the risks inherent in climate change, are backing the Paris Agreement and taking governments to task on their lack of action (Esty & Bell, 2018).

Thus, the 27 principles of the Rio Declaration began an ongoing entanglement of world trade and environmental concerns focused on reporting of GHG emissions under IPCC guidelines; and local authorities taking action to mitigate emissions and educate and protect their communities, both of which have led to businesses and civil society taking leadership roles in calling for climate action.

Reporting on modern slavery and inequality

The UN's history on inequality and the eradication of modern slavery has a very different trajectory. The 1992 Rio Declaration recognised the link between disparities in standards of living¹⁴

⁴ http://data.un.org/Data.aspx?d=GHG&f=seriesID%3AGHG

⁵ https://www.ipcc-nggip.iges.or.jp/public/gp/english/

⁶ https://www.ipcc-nggip.iges.or.jp/public/gpglulucf/gpglulucf.html

⁷ https://www.ipcc-nggip.iges.or.jp/public/2006gl/

⁸ https://www.ipcc-nggip.iges.or.jp/public/wetlands/

⁹ https://sustainabledevelopment.un.org/milestones/unced

¹⁰ https://www.jus.uio.no/lm/environmental.development.rio.declaration.1992/12.html

¹¹ https://www.wbcsd.org/Overview/Our-history

¹² https://unfccc.int/process/the-kyoto-protocol/status-of-ratification (currently 192)

¹³ https://unfccc.int/process/the-paris-agreement/status-of-ratification

¹⁴ E.g. 'inequalities in income/wealth, education, health, and nutrition'

and the essential conditions for sustainable development (Principle 5¹⁵). And Agenda 21 includes actions on combatting poverty (Ch 3) (UN, 1992). But poverty does not constitute inequality. At the same time as poverty was decreasing, inequality was increasing. This accumulation of wealth in the hands of the few has been at the expense of those working for little reward and often in dangerous conditions. Hence the 2016 Sustainable Development Goals¹⁶ recognise the need to address a person's ability to choose one type of life over another. SDG sub-goal 8.7 states: "Take immediate and effective measures to eradicate forced labour, end modern slavery and human trafficking and secure the prohibition and elimination of the worst forms of child labour...". Below we examine 90 years of addressing modern slavery.

In 1926 the League of Nations held the first international Slavery Convention¹⁸. Its aim was to tackle the abolition of "all acts involved in the capture, acquisition or disposal of a person with intent to reduce him to slavery" (Article 1 pt2). Following WWII functions of the League of Nations were transferred to the United Nations, including the Slavery Convention which was adopted¹⁹ in the 1950s (UN Human Rights, 1956). It followed establishment of the International Labour Office (ILO) with responsibility for monitoring forced labour and the worst forms of child labour; and the 1948 UN Declaration of Human Rights²⁰ in which Article 4 states: "No one shall be held in slavery or servitude; slavery and the slave trade shall be prohibited in all their forms."

Throughout the 1960s and 70s international covenants were developed to address aspects of an expanded definition of *slavery*. These included: the International Covenant on Civil and Political Rights (1976), dealing with right to life and liberty, abolition of slavery including forced labour and the establishment of a Human Rights Commission (UN Human Rights, 1976); the International Covenant on Economic, Social and Cultural Rights²¹ (1976), dealing with trade union membership and rights to freely chosen work; the Convention on the Elimination of All Forms of Discrimination against Women (1981) (UN, 1979); and Convention on the Rights of the Child (1990), protecting the child from all forms of exploitation (UN, 1990).

The terms *contemporary*, or *modern forms of slavery*, today referred to as *modern slavery*, were introduced by the Office of the High Commissioner of Human Rights in 1991 in Fact Sheet 14 (UN, 1991) to distinguish today's multifaceted clandestine practices from the 17th and 18th century slave trade, which had been conducted openly and legally. Fact sheet 14 was released as part of a 1990s' campaign to raise public awareness of human rights and the work undertaken to tackle their abuse. Its definition of *modern slavery* included: "sale of children, child prostitution, child pornography, the exploitation of child labour, the sexual mutilation of female children, the use of children in armed conflict, debt bondage, the traffic in persons and the sale of human organs" (p. 1).²²

In 2001 UNESCO held the World Conference against Racism, Racial Discrimination, Xenophobia and Related Intolerance in Durban. Despite the parallel NGO forum ending in disarray, the conference issued in its culminating declaration, a program of action that urged states "to enact

¹⁵ "all people shall co-operate in the essential task of eradicating poverty as an indispensable requirement for sustainable development, in order to decrease disparities in standards of living..." https://www.cbd.int/doc/ref/rio-declaration.shtml

¹⁶ https://www.un.org/sustainabledevelopment/sustainable-development-goals/

¹⁷ For example: Gender Equality (5), Decent Work and Economic Growth (8), Good Health and Well-Being (3), Quality Education (4), Peace, Justice and Strong Institutions (16).

¹⁸ https://www.un.org/en/genocideprevention/documents/atrocity-crimes/Doc.13 slavery%20conv.pdf

¹⁹ https://treaties.un.org/doc/source/docs/A RES 8 794-E.pdf

²⁰ https://www.un.org/en/universal-declaration-human-rights/

²¹ https://www.ohchr.org/Documents/ProfessionalInterest/cescr.pdf

²² Contrast this awareness raising campaign to define modern slavery with the significant action taking place at the same time to assist states in curbing their GHG emissions: establishment of the UN GHG inventory and the World Business Council for Sustainable Development in 1990; and an international treaty on climate change (UNFCCC), Rio Earth Summit and Agenda 21 in 1992.

and implement... laws against trafficking in persons, ..., and smuggling of migrants, taking into account practices ... such as debt bondage, slavery, sexual exploitation or labour exploitation" (p.33).²³ It acknowledged that "slavery and the slave trade are a crime against humanity" (General issue 13, p.6). ²⁴ It urged states to end such practices and to enact laws against people trafficking, slavery, debt bondage and sexual and labour exploitation. ²⁵ (United Nations, 2001).

Following this conference the first international legal instrument to tackle human trafficking, the Trafficking Protocol (UN, 2000), entered into force on 25th December 2003. It provided the first working definition of trafficking in persons²⁶ and required ratifying states to criminalise these practices, becoming the first international instrument to require states to assist and protect victims of crime²⁷. It fell under the jurisdiction of the UN Office of Drugs and Crime and was supplementary to the UN Convention against Transnational Organized Crime,²⁸ thus its legal instruments focused on organised criminal groups.

In anticipation of the Protocol, the Bali Process Ministerial Conference²⁹ co-chaired by Australia and Indonesia, was established in the Indo-Pacific region in 2002 to address people smuggling, trafficking in persons and related transnational crime³⁰. A year later a media release on achievements, issued by the joint chairs of the 2003 Bali Process Ministerial Conference, celebrated regional cooperation to combat people smuggling and illegal migration³¹. It also included a UNHCR address on building regional approaches to irregular movement of asylum-seekers and refugees.³² Several reasons were identified for this seeming reluctance to address trafficking directly. A 2005 report to the UN Expert Group Meeting on International Migration and Development on Trafficking in Human Beings (Omelaniuk, 2005) identified 'lack of data, neglect, lack of resources, and economic trade-offs between public enforcement and private sector laissez fairism' (p. 2) as a reason for a 'dearth of legislation against trafficking in persons'. In response the Human Rights Council (2007) resolved to appoint a Special Rapporteur on contemporary forms of slavery to replace the Working Group on Contemporary Forms of Slavery (est. 1975), hoping that this would lift the prominence of and urgent need to address the issue of contemporary slavery³³ (Human Rights Council, 2007).

In a further bid to shift focus away from organised crime the UN's 2010 *Recommended Principles and Guidelines on Human Rights and Human Trafficking* framed trafficking along with slavery, sexual exploitation, child labour, forced labour, debt bondage and forced marriage as human rights violations and mapped out states' obligations to address them under international

²³ A parallel NGO forum attracting 8,000 delegates, ended in disunity, tainting the outcome of the main conference. A 2009 follow up Review Conference was poorly attended. Notwithstanding, the UN Human Rights Council established an Intergovernmental Working Group on the effective implementation of the Durban Declaration and Programme of Action in 2002 by the UN Economic and Social Council to 'make practical and action-oriented recommendations'

²⁴ The 2011 Durban III Conference was also boycotted by several nations including the UK, USA, Australia, Canada and several EU countries on grounds that the conferences were promoting division, particularly anti-Semitism.

²⁵ In this Declaration the business sector and civil society rate several mentions associated with their responsibilities to address racism, but unlike the Rio Declaration's fundamental call to action on emissions for all groups in society, they were not called on to help combat slavery and the slave trade.

²⁶ ""Trafficking in persons" shall mean the recruitment, transportation, transfer, harbouring or receipt of persons, by means of the threat or use of force or other forms of coercion, of abduction, of fraud, of deception, of the abuse of power or of a position of vulnerability or of the giving or receiving of payments or benefits to achieve the consent of a person having control over another person, for the purpose of exploitation. Exploitation shall include, at a minimum, the exploitation of the prostitution of others or other forms of sexual exploitation, forced labour or services, slavery or practices similar to slavery, servitude or the removal of organs;"

https://www.ohchr.org/en/professionalinterest/pages/protocoltraffickinginpersons.aspx accessed 04/11/19

27 By contrast around this same time nations and UN bodies working on the climate change agenda had agreed to quantification of emissions, regular collection of data at business, state and global level, regular reporting and the tracking of emissions over time.

²⁸ https://www.ohchr.org/en/professionalinterest/pages/protocoltraffickinginpersons.aspx accessed 03/11/19

²⁹ https://www.baliprocess.net/ accessed 12/01/2020

³⁰ https://www.baliprocess.net/UserFiles/baliprocess/File/BRMC1.pdf accessed 03/11/19

³¹ https://www.baliprocess.net/UserFiles/baliprocess/File/JointMedia1.pdf accessed 03/11/19

³² https://www.baliprocess.net/UserFiles/baliprocess/File/UNHCR%20Paper%20to%20Bali%20II.pdf accessed 03/11/19

³³ Note that this is all taking place 20 years after the UN IPCC had provided national guidance on GHG emissions data collection.

human rights law (Office of the UN High Commissioner for Human Rights, 2010). Such an approach focused on the persons and ensured that the problem could not be framed as one of organized crime or migration, as had previously been the case. In 2012 the ILO estimated that the Asia Pacific region accounted for 56% of the global total of victims of forced labour (International Labour Office (ILO), 2012). Even so it wasn't until after the 2017 Bali Process Ad Hoc Group of Senior Officials' meeting that the focus shifted to detecting and addressing modern slavery in supply chains. In the meantime illegal profits from trafficking world-wide had risen from around US\$7-10 billion³⁴ a year in 2003 (UNESCO) to around US\$36bn in 2014 (President of the General Assembly) (UN, 2014).

Thus, it seems the 2001 Durban World Conference, which ended acrimoniously, was a missed opportunity for uniting world governments and civil society in condemnation of modern slavery. It was a missed chance to: embed the language of modern slavery in world trade; institute reporting of modern slavery under UN guidelines; and support local authorities in taking action to mitigate slavery and educate their communities on its prevalence and effects. All of which could have supported businesses and civil society in taking leadership roles calling for action.

Discussion

GHG emissions: 50 years since the first international stocktake
Despite the 1972 stocktake, the development of a metric to measure GHG emissions, reporting to the UN and a concerted effort to educate businesses and the public on climate change, emissions continue to rise (Fig 2).

Total CO2 emissions from 1970 - 2016

Fig. 2 Total CO₂ emissions in million kilotonnes from 1970 – 2016, based on data from Janssens-Maenhout et al (Janssens-Maenhout, 2017)

Sawyer, writing about 'man-made' carbon dioxide emissions in 1972 predicted that if they were to continue rising at the rate of change observed in the period 1958-1969, they would be around 375 p.p.m. by 2000 (Sawyer, 1972) (Nicholls, 2007). They were in fact 370.09 p.p.m. in 2000 (2 Degrees Institute, n.d.) indicating that all the effort over the intervening years at business, state and

³⁴ https://www.ilo.org/wcmsp5/groups/public/---ed norm/---declaration/documents/publication/wcms 081971.pdf (p.18) accessed 07/11/19

global level, to quantify emissions, collect data, report regularly and track them over time had done little or nothing to arrest their growth. Between 2005 when the Kyoto Protocol took effect and 2008 when Peters and colleagues undertook research into consumption and production based emissions, total emissions rose by 3% (Peters, Minx, Weber, & Edenhofer, 2011). Between 2008 and 2017 they rose by 1.5% (Global Carbon Project, 2018), despite the 2015 Paris Agreement and global businesses calling upon governments to take 'bold action' on climate change in advance of that Agreement. The only drops in emissions since 1972 have been during global crises (Peters, et al., 2012) with the most recent, the global financial crisis, seeing a drop of 1.4% in emissions 2008-2009 followed by recovery in 2010 and steady increase thereafter³⁵.

This increase in emissions has been accompanied by increases in extreme weather events, often triggering floods and fires like Australia's extreme bush fires in 2019/2020 (Hasham, 2020). With more and more citizens world-wide personally affected there has been a groundswell of action supported by NGOs³⁶ and sometimes governments (Climate Emergency Declaration, 2019). Climate change litigation has also expanded since 2016 with lawsuits brought by investors, shareholders, cities and states against high GHG-emitting companies; and by citizens, corporations and NGOs against governments (Setzer & Byrnes, 2019). In the US and Europe young people have taken governments to court over their lack of action on climate change (Pearce, 2018). In 2019 Greta Thunberg addressed the UN on lack of action (UN, 2019) and with others (Marris, 2019) inspired millions around the world to demonstrate their support (Singh, Oliver, Siddique, & Zhou, 2019). In 2019 the Climate Emergency Declaration identified 1,195 jurisdictions and local governments around the world that have declared a climate emergency (Climate Emergency Declaration, 2019).

Modern slavery: 90 years since the first international stocktake

A global focus on slavery began with the League of Nations Convention in 1926, 20 years later came the Declaration of Human Rights, followed 40 years on by the Convention on the Rights of the Child and another ten years after that by the Trafficking Protocol, which precipitated activity around people smuggling, asylum seekers and refugees. Despite this long-time effort to deal with various aspects of what's now referred to as *modern slavery* it is still on the rise. In 2017 an alliance of non-profit organisations estimated there were around 40 million slaves in the world (Datta, 2019). This was a massive increase on a 2005 figure of 12.3 million³⁷. Taking one aspect of modern slavery – trafficking – it was estimated in 2019 that 24.9 million people were deprived of their freedom by traffickers (US Department of State, 2019), and according to the UN Human Rights Office of the High Commissioner, "Despite the existence of a comprehensive international legal framework, millions of children, women and men continue to be trafficked each year, in all regions and in most countries of the world." (UN, n.d. (a)). However, unlike action on emissions and climate change there is no global obligation to assess and report modern slavery, no coordinated group of business leaders speaking out, no local government role in educating and protecting their populations and no citizens' uprising. So what is missing?

There are several major differences in the approaches to addressing climate change and addressing modern slavery. Firstly, there are no Guidelines for Modern Slavery Inventories, no Integrated Environmental, Social and Economic Accounting Framework and no Paris Agreement.

³⁵ 2.7% increase in 2018 (https://ourworldindata.org/co2-and-other-greenhouse-gas-emissions) accessed 05/12/19

³⁶ E.g. Climate Generation (https://www.climategen.org/take-action/act-climate-change/take-action/); Earth Day (https://www.earthday.org/campaigns/climateaction/); Global Citizen (https://www.globalcitizen.org/en/content/united-nations-climate-report-what-you-can-do/); Beyond Zero Emissions (https://bze.org.au/zero-carbon-communities/local-government-council-climate-action-review/); Government of Victoria (https://www.sustainability.vic.gov.au/About-us/What-we-do/Taking-action-on-climate-change);

³⁷ It is acknowledged to be extremely difficult to estimate the number of slaves in the world today. This is partly because of the definition of modern slavery – what to count – and partly because of estimation methodology. The two numbers presented here are indicative only. They were estimates arrived at by different organisations (https://theconversation.com/fact-check-how-many-people-are-enslaved-in-the-world-today-107078). Estimates from the <a href="https://www.wallongover.org/wallongov

Modern Slavery lacks powerful metrics like those such as carbon footprinting, that are used to define and track emissions. For example, Australia's National Greenhouse and Energy Reporting Act 2007³⁸ was accompanied by technical guidelines, based on UN Statistics Division standards, to facilitate reporting under the Act. The Australian Modern Slavery Act's 2018 *Guidance for Reporting Entities* advises reporting entities to 'develop tools and policies to monitor high risk suppliers' (Australian Government, 2019, p. 52). This lack of metrics on modern slavery makes it hard to assign targets and document and report on progress towards its elimination.

Secondly there is as yet no common language around modern slavery like that which keeps emissions in the news. Whereas today we can all speak the language of climate change: primary school students discuss CO2, Renewable Energy, Fossil Fuels and Global Warming and display sophisticated understanding on their protest banners_(ABC, 2019). On the contrary there is little agreement even on the definition of modern slavery. Australia's Modern Slavery Act definition includes 'trafficking in persons, slavery, servitude, forced marriage, forced labour, debt bondage, the worst forms of child labour, and deceptive recruiting for labour or services' (Australian Government, 2018) (Draft Guidance for Reporting Entities p.7), while in the ILO's explanation modern slavery is subsumed in the definition of forced labour_(International Labour Organization, n.d.). The Australian Government's inquiry into establishing a Modern Slavery Act (Ch3) discusses in detail the importance of a commonly understood definition as a starting place for a common language and essential to enforcing legislation on modern slavery (Joint Standing Committee on Foreign Affairs, Defence and Trade, 2017).

And thirdly there seems to be no global leadership on combatting modern slavery: no Intergovernmental Panel on Modern Slavery to recommend response strategies; or UN Framework Convention on Modern Slavery to help governments stabilise and address its occurrence. And unlike emissions, where in December 2018 the Alliance of CEO Climate Leaders signed a letter to world leaders telling them to be ambitious in addressing climate change, there is no similar high profile corporate leadership on modern slavery (Alliance of CEO Climate Leaders, 2018). In Australia with the exception of Andrew Forrest, former CEO of Fortescue Metals Group, cofounder of the Minderoo Foundation, there is little visible leadership from business and industry. On the contrary business leaders have been known to deliberately not look for slavery in their supply chains in case they find it, fearing media vilification and a detrimental effect on the bottom line (Bourke, 2016).

That there is no modern slavery international reporting obligation, no national reporting framework, no common language and no global leadership are indication of our collective lack of understanding of its importance to the human condition and its fundamental role in climate change.

Why compare?

Why does any of this matter when emissions have continued to rise despite all the measuring, recording, reporting and protesting and the effects of climate change are visible and visceral, affecting many lives? It seems that knowledge and protesting are not sufficient to stop the rise of emissions so what is the point of a comparison between the world's approach to arresting GHG emissions and that of arresting modern slavery when neither approach has done its job so far? Perhaps the answer lies partly in their separate trajectories.

Participants at the Rio Earth Summit discussed inequality; had they seen it as a fundamental enabler of emissions perhaps action on modern slavery – as proxy for inequality – would have developed alongside action on emissions. We've had years of emissions policy development, summits and strategies keeping climate change in the news. Consequently, we have the wherewithal

³⁸ http://www.environment.gov.au/climate-change/climate-science-data/greenhouse-gas-measurement/nger

to address the UN (UN, 2019), march through the streets (Singh, Oliver, Siddique, & Zhou, 2019) debate the climate deniers, because we know the language and can access tools such as footprint calculators. Had we been armed with similar knowledge about modern slavery then governments, businesses, NGOs and citizens would have had the wherewithal to take action on modern slavery too. Tackling the two together may have made a difference. In 2019 the United Nations Climate Change Secretariat reported on climate action and support around the world (United Nations Climate Change Secretariat, 2019). Importantly while recognising the benefit of information and a broad participatory process, they cite the need for tackling poverty and inequality as crucial to increasing our collective capacity to arrest climate change.

Final remarks

Imagine the impact on inequality if some of the annual profits per modern slavery victim, which can be as high as US\$34,800 per capita in developed economies, were taxed and used to support education for the poorest members of society. Imagine what it would do for the lives of victims if the \$21bn rightfully theirs was paid as wages instead of someone's profit (International Labour Office (ILO), 2014). We'd have a double dividend – workers getting paid and poor members of society able to afford an education that would help protect them from slavery. Simultaneously we would take out of the system some of that inequality fuelling climate change (David, Espagne, & Marx, 2019) (Thorwaldsson, 2019) redirecting spending from emissions intensive goods and services to services such as health and education, which are the likely purchases for poor members of society whenever they have discretionary income (Evans & Popova, 2017).

Pie in the sky? Is modern slavery so embedded in current business practices that it's unlikely to be relinquished (Banerjee, 2020)? Maybe but the economic and social consequences of climate change are beginning to manifest (Butler, 2020) and are likely to increase in frequency and severity (UN Secretary General, 2019) which in turn may even disrupt the current business model. If this provides urgency and if addressing emissions and inequality together are seen as crucial to arresting climate change, becoming fundamental to future action, then maybe there is room for optimism.

Climate action needs to be linked with the source of money that props up the status quo – inequality and its extreme manifestation, modern slavery. This is why it matters to everyone that modern slavery is understood and addressed. It matters to the victims and to the planet. For the sake of all victims of modern slavery, whose lives can be made better by concerted action to address this crime against humanity and for everyone on the planet whose lives are and will be detrimentally affected by climate change, the world's approach to remedying modern slavery is crucially important.

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Appendix 1: Comparison of timeline for development of action on climate change and that for modern slavery

	Climate Change & GHG emissions	Inequality & Slavery
1815		Declaration Relative to the Universal Abolition of the Slave Trade http://www.bbc.co.uk/ethics/slavery/modern/law.shtml
1926		League of Nations' Slavery Convention; definition of slavery
1930		Art. 2 ILO Convention No 29 defined forced or compulsory labour to 'mean all work or service which is exacted from any person under the menace of any penalty and for which the said person has not offered himself voluntarily' https://opil.ouplaw.com/view/10.1093/lawrepil/9780199231690/law-9780199231690-e874
1944		ILO constitution establishes a permanent organisation https://www.ilo.org/dyn/normlex/en/f?p=1000:62:1566624867971040::NO:62:P62_LIST_ENTRIE_ID:2453907:NO#A22
		UN Commission on Human Rights established https://www.ohchr.org/EN/HRBodies/CHR/Pages/CommissionOnHumanRights.aspx
1948		UN Declaration of Human Rights
1956		League of Nations Convention accepted by UN; definition of slavery ammended and accepted
1957		ILO The 1957 Convention (No 105) concerning the Abolition of Forced Labour of the ILO in its Art. 1 further committed States Parties to eradicate forced labour in all forms, https://opil.ouplaw.com/view/10.1093/lawrepil/9780199231690/law-9780199231690-e874
1966		Covenant on Civil and Political Rights; Covenant on Economic, Social and Cultural Rights
1972	Stockholm conf on human environment	
1975		UN Working Group on Slavery established responsible for the study of slavery
1979		Convention on Elimination of all forms of Discrimination against Women
1984		UN Working Group on Slavery fact finding visit to Mauritania https://opil.ouplaw.com/view/10.1093/law.epil/9780199231690/law-9780199231690-e874
1988	IPCC est by UNEP and World Meteorogical Organisation (WMO) https://www.ipcc.ch/about/history/	Working Group on Slavery renamed Working Group on Contemporary Forms of Slavery (monitor application of UN slavery conventions 5 experts meet once a year for a week)
1989		Convention on the Rights of the Child
1990	GHG inventory; WBCSD founded	
1991		Office of High Commissioner of Human Rights Fact Sheet 14 (modern slavery definition); public awareness campaign
1992	Earth Summit in Rio + NGO parallel forum; UNFCCC open for ratification; Results: Rio Declaration inc. Principle 10 - need to engage all concerned citizens; & action plan, Agenda 21 inc. Last Auditorium and actions.	UN Commission on Human Rights Working Group on Contemporary Forms of Slavery: designate Centre for Human Rights as the focal point for the coordination of activities in the United Nations for the suppression of contemporary forms of slavery https://www.refworld.org/docid/3b00f0bc46.html
1993	UN Statistics Division published Integrated Environmental and Economic Accounting Framework	Vienna Declaration and Program of Action: World Conference on Human Rights; Office of the High Commissioner est https://www.ohchr.org/EN/AboutUs/Pages/HighCommissioner.aspx
1996	IPCC Guidelines on GHG Inventories	
1997	Kyoto Protocol adopted	Mary Robinson (1997-2002) becomes UN High Commissioner for Human Rights with responsibility for combined Office of the High Commissioner and the Centre for Human Rights
2000	IPCC Guidelines on GHG Inventories: further guidance and updates	Millenium Development Goals (poverty); Trafficking Protocol adopted by UN
2001		Third Durban World Conference against Racism, Racial Discrimination, Xenophobia and Related Intolerance
2002		UNHCHR report on abolishing slavery and its contemporary forms
		Ball Process (2002) on People Smuggling, Trafficking in Persons and Related Transnational Crime; co-chaired by Indonesia and Australia
2003	IPCC Guidelines on GHG Inventories: further guidance and updates	Trafficking Protocol defined trafficking and required ratifying states to criminalise it
2004		Special Rapporteur on trafficking of persons appointed by the CommHR https://opil.ouplaw.com/view/10.1093/law:epil/9780199231690/law-9780199231690-e874
2005	Kyoto Protocol - Binding targets come into force	ILO produced global estimates of forced labour and human trafficking
2006	IPCC Guidelines on GHG Inventories: further guidance and updates	Final meeting of Working Group on Contemporary Forms of Slavery; Human Rights Council created replacing the UN
2007		Commission on Human Rights https://www.ohchr.org/EN/HRBodies/HRC/Pages/AboutCouncil.aspx UN Special Rapporteur on contemporary forms of slavery appointed by Human Rights Council to replace the Working Group on Contemporary Forms of Slavery (est 1975) https://www.ohchr.org/EN/Issues/Slavery/FSRSlavery/Pages/OverviewMandate.aspx
2009		Durban II
2010		UN's Recommended Principles and Guidelines on Human Rights and Human Trafficking
2011	Durban 17th CoP: https://unfccc.int/sites/default/files/resource/docs/2011/cop17/eng/09a01.	Guiding Principles on Businss and Human Rights (requires action to address modern slavery in the supply chain); Durban III
2012	Doha amendment to the Kyoto Protocol	
2013	IPCC Guidelines on GHG Inventories: further guidance and updates	19th International Conference of Labour Statisticians recommends ILOset up a working group to share best practice on forced labour surveys
2014	UN Statistics Division updated Integrated Environmental and Economic Accounting Framework	Human Rights Council appointed Ms. Urmila Bhoola as Special Rapporteur on contemporary forms of slavery
2015	Paris Agreement (UNFCCC agreement to combat climate change)	Sustainable Development Goals; UN's ILO Data Initiative on Modern Slavery
2017		inaugural Bali Process Government and Business Forum (Perth)
2019	Paris agreement ratified by 187 Parties	· ·
Key	local councils involved	
	Business community involved	
	data	
-	govenments engagement	
	NGO engagement	
—		
	public awareness	