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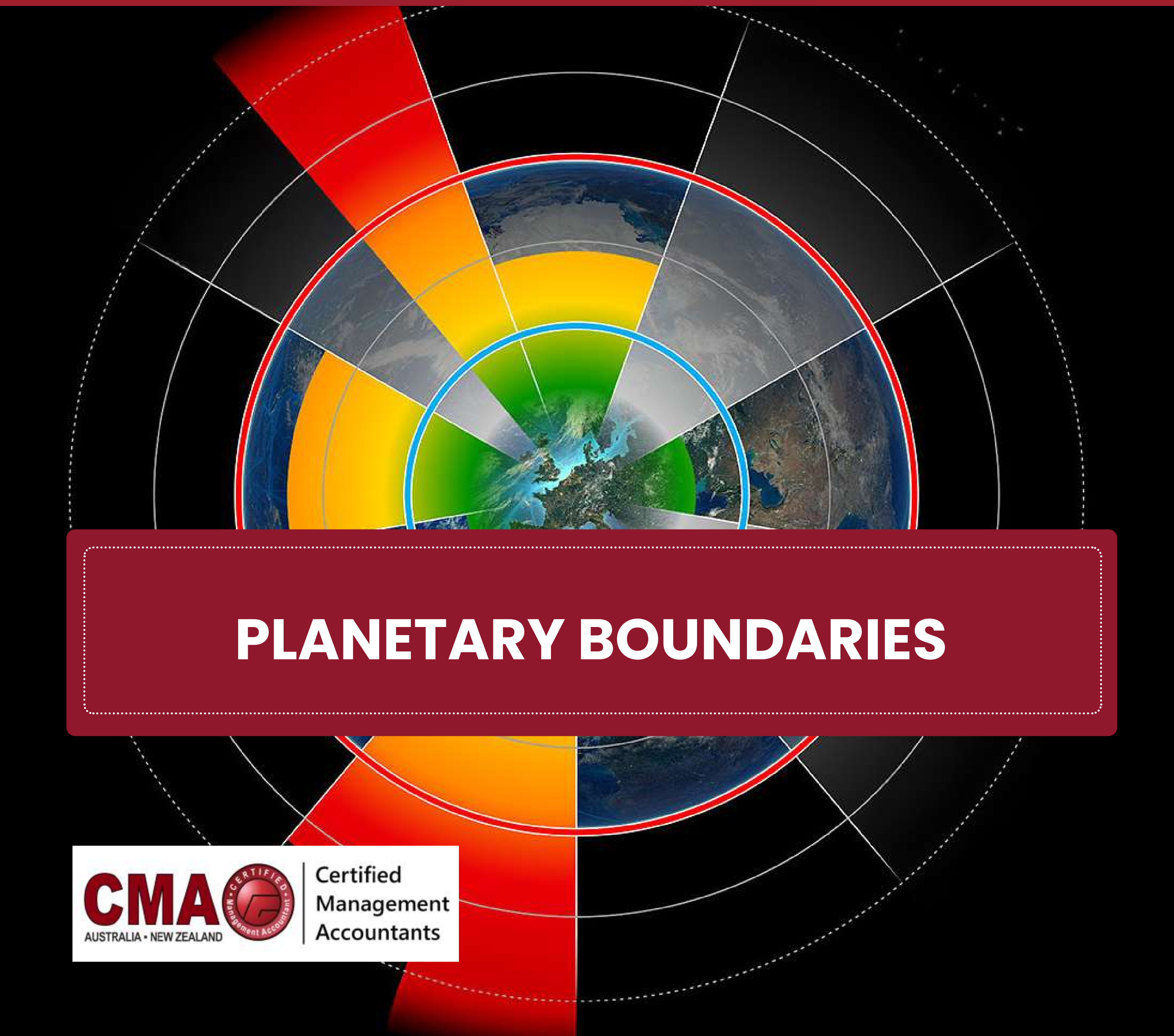
THE CASE FOR A PLANETARY MANAGEMENT ACCOUNTING FRAMEWORK



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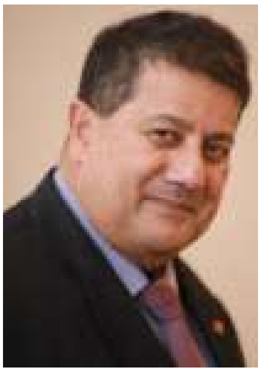
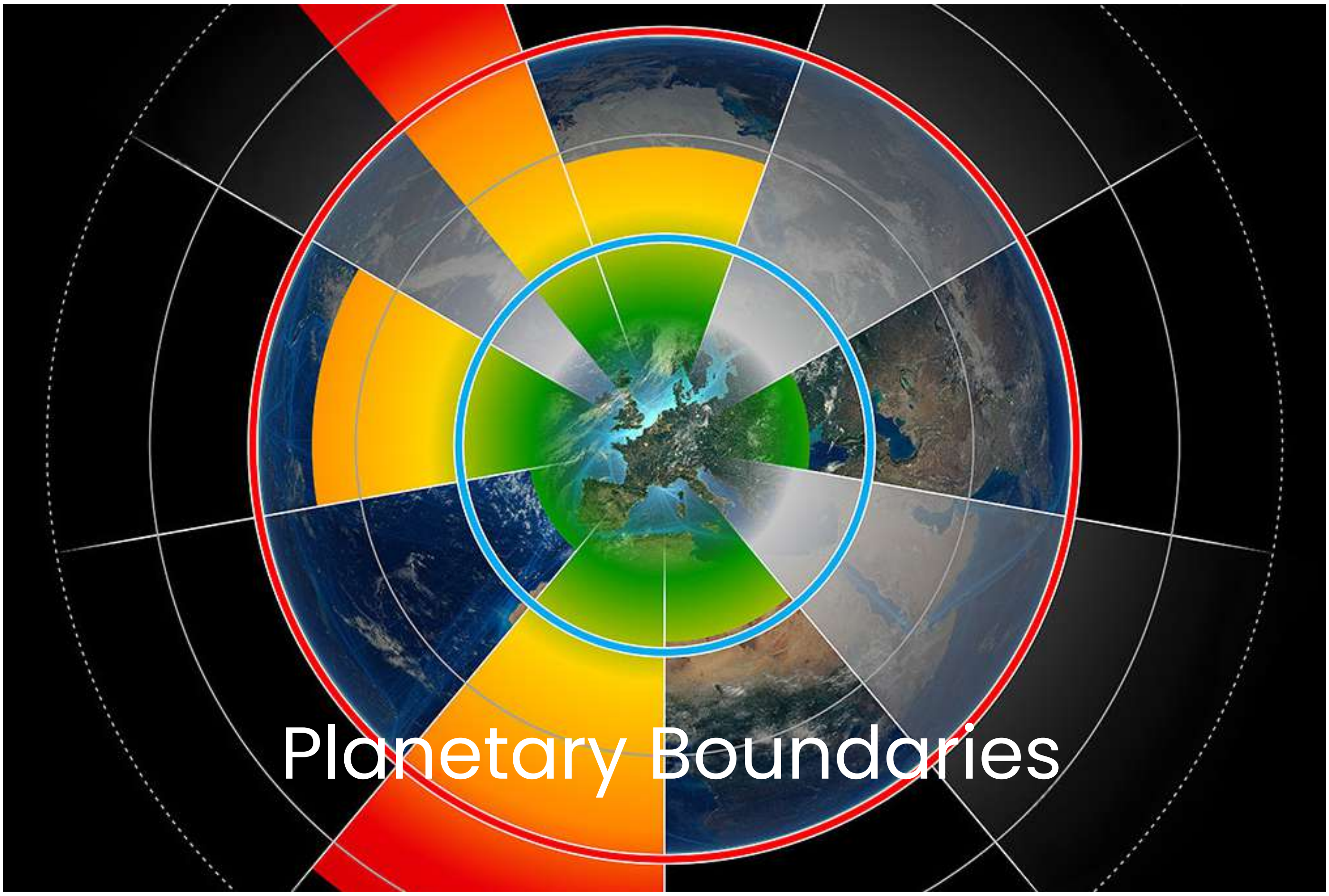


THE CASE FOR A PLANETARY MANAGEMENT ACCOUNTING FRAMEWORK

Prof. Janek Ratnatunga, CEO, CMA ANZ



Introduction

The 'Earth system' is the culmination of all of the physical, chemical, and biological activities that occur on the planet. According to the principles of physics and biochemistry, the Earth system is made up of numerous interrelated processes (including transpiration, photosynthesis, and evaporation) that store, transport, and change matter and energy (Skinner, 2011).

The Earth system can function in a certain steady state for many thousands of years when its processes are in harmony. However, major disturbances to Earth-system processes can lead to an abrupt change of state.

Certain outside variables, like the sun's output or the geometry of Earth's orbit around it, have the power to alter the planet's state and are obviously not under human control. On the other hand, scientists believe that it is human activity over the next 50–100 years that will most likely determine the state of the planet. Human activity is the only factor affecting the state of the planet that is within our control.

Planetary Boundaries (PBs)

Nine Planetary Boundaries (PBs), or the limits for Earth-system processes within which there is little chance of a departure from the current state, were postulated by Rockström et al. (2009) (see Table 1). These Boundaries collectively establish a "safe-operating-space" for people.

Unfortunately, six of the planetary boundaries— novel entities, climate change, biosphere integrity, land-system change, freshwater change and biogeochemical flows—have already been crossed. According to Steffen et al. (2015), all of them are dependent on the condition of the Earth's soil. Soil condition refers to the state of the soil, which includes its physical, chemical, and biological characteristics and the processes and interactions that connect them; and which in turn determine the capacity of the soil to support ecosystem services.

The Planetary Boundaries indicate that we are now residing outside of the safe operating space, giving us an idea of the severity and urgency of the crisis. The issue is, can we, as management accountants, contribute to fix this planetary problem?

Earth system process	Control variable	Planetary Boundary
Climate change	Atmospheric concentration of carbon dioxide	≤ 350 ppm
	Change in radiative forcing	≤ 1 W/m2
Biodiversity loss	Global extinction rate	≤ 10E/MSY
Biogeochemical flows (Nitrogen and phosphorus cycles)	Reactive nitrogen removed from the atmosphere	≤ 62Tg
	Phosphorous flowing into oceans	≤ 11Tg
Land-system change	Area of forested land as a percentage of original forest cover	≥ 75%
Stratospheric ozone depletion	Stratospheric concentration of ozone measured in Dobson Units (DU)	≤ 5% below pre-industrial levels (290 DU)
Ocean acidification	Mean saturation state with respect to aragonite in the oceans	≥80% of the pre-industrial level
Fresh water use	Freshwater consumption	≤4000 km3/yr
Novel entities	NA	NA
Atmospheric aerosol loading	Aerosol optical depth	NA
		Regional limit of ≤0.25

Table 1 Summary of the Planetary Boundaries (adapted from Steffen et al., 2015)

Clearly, management accountants are not trained to comprehend or analyse the information on planetary boundaries given in Table 1, let alone formulate strategies to mitigate the consequences of exceeding these PBs. However, management accountants are very concerned in the allocation of scarce resources in meeting the twin challenges of sustaining lives and livelihoods, and the accountability issues that surface in crisis scenarios.

Therefore, the allocation of societal responsibilities to ensure humanity stays within its planetary boundaries requires the formation of social purpose alliances with multiple disciplines. It is by leveraging the strengths of multiple disciplines that humanity can respond to crises such as global pandemics and climate challenges. In situations of scarce resources, management accountants play a crucial role in providing data-driven insights and cross-functional knowledge to inform strategic planning across a range of domains, such as climate risk mitigation, carbon emissions reduction goals and equitable allocation of resources.

This article provides an overview of a novel paradigm for regulating planetary boundaries that combines theories from three branches of knowledge as first postulated by Meyer & Newman (2018) and requires a multidisciplinary approach. These are:

- *Management theory* shows that the most effective approach to managing the Earth system is likely to be a poly-scalar approach, i.e., one that can be applied in different ways, across different areas of society, and at different scales, which is coordinated by a general system of rules. A *poly-scalar approach* does not rely on a global approach. Efforts at different scales can thus begin right away. This does not preclude the continued efforts to agree to top-down solutions—which will almost certainly play a critical element in successful management of the Earth system (e.g. the Paris Accord).
- *Management accounting theory* which highlights the importance of measuring and monitoring the allocation of resources and the performance of assets and flows in order to make informed decisions.
- *Environmental management accounting theory* which demonstrates that the type of indicator selected is critical to the applicability to policy and behaviour applications; in this case, it highlights the need to convert the PBs into pressures on the environment. It uses a *DPSIR (Drivers, Pressures, States, Impacts, Responses)* framework to look at and analyse the important and interlinked relationships.

The purpose of this article is to summarise the work of Meyer & Newman (2018), who suggested a new paradigm called the Planetary Accounting Framework (PAF) and make it applicable to management accountants via a Planetary Management Accounting Framework (PMAF). The PMAF is based on the allocation of Planetary Quotas and Planetary Boundaries. The Planetary Quotas are limits for human activities which are derived from the Planetary Boundaries. They show what is needed to return to and live within a safe operating space.

The domains of the three aforementioned theories Limits (Planetary Boundaries), Change (poly-scalar management) and Pressures (environmental management accounting), overlap to create the novel concept of the Planetary Quotas (Figure. 1). As a result, these adhere to the Sustainable Earth philosophy, which links science and the Planetary Boundaries to community and corporate policy.

Figure 1: The Integrated Approach to Developing the Planetary Quotas

As shown in Figure. 2, this framework provides the platform for behavioural, policy, technological, and organisational change.

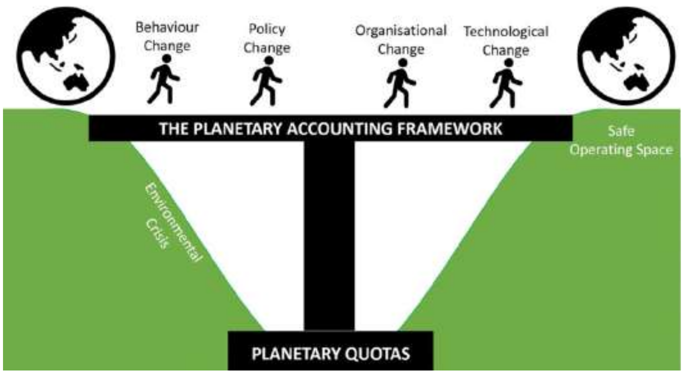


Figure 2: The Planetary Quotas form the foundations of the PMAF – A platform for change

The Theoretical Foundations for an Integrated Approach

This section presents an overview of the theories from the three branches of knowledge described above, which together provide an integrated approach to change with respect to the Planetary Boundaries. It is shown how the Planetary Quotas can be derived from the Planetary Boundaries.

Poly-Scalar Management: A Strategy to Regulate the Earth System.

Taking care of the Earth system is not an easy undertaking. The majority of theories from the past on the best ways to manage shared resources (such fisheries, forests, or the atmosphere) concluded that the only viable options were private management or top-down governance (Meyer & Newman, 2018). The underlying presumptions of these ideas, which relied on basic game theory, were that individuals will always act to maximise their own gain regardless of the greater good. According to Hardin (1968), the "tragedy of the commons" is that human nature will force people to keep using resources excessively for short-term, selfish gain until everyone suffers.

However, these ideas fall short of explaining how communities function in real life and how social science has come to grasp how human behaviour can collectively bring about change. Communities and cultures are created to facilitate the pursuit of more general objectives than just selfish gain. The question then is, if top-down governance and private action do not address our understanding of social science and change, what sort of global environmental management structures would be more effective?

Managing human behaviour entails managing human impacts on the environment. This could refer to an individual's daily conduct, the choices made by a CEO, a public servant, or a community member. Research grounded on observed behaviour reveals that a wide range of factors impact decisions, and that behaviour is very unpredictable. A person's lifestyle, social standing in the family, the workplace, motivations, past actions, habits, societal conventions, context, and technology all come into play. Historically, attempts to modify behaviour have generally focused on social conventions, as well as personal and communal values. The results, which show that context and technology play major roles in shaping decision-making, emphasise the significance of infrastructure, technology, and therefore governance and industry in influencing decisions that are pro-environmental or otherwise. For example, social media has been observed to unintentionally encourage younger generations to transition from private to public transportation since it enables them to maintain social connections with their peers while commuting.

The findings corroborated by the science of change indicate the importance of various activity scales. It shows that infrastructure and technology, in addition to one's community, are crucial for bringing about change. The notion that integrated community, corporate, and governmental solutions can significantly outperform the sum of their parts is known as the "magic of sustainability" (Figure 3). More specifically, extremely creative and effective solutions that support change can arise when long-term community values and ethics coincide with mid-term government rules and infrastructure as well as short-term business advances.

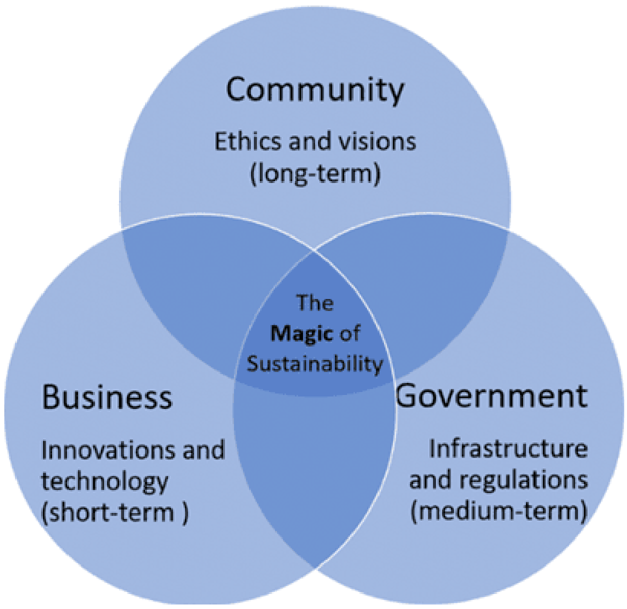


Figure 3: The Magic of Sustainability (adapted from Newman, 2005)

Drawing from these theories, Meyer & Newman (2018) proposed that the most effective approach to change is likely to be one that is:

"...integrative across different scales, sectors, and timeframes, that is not controlled by a single body, but which could be implemented through government, private action, or self-organised management, that is coordinated by a general system of rules which have different mechanisms at different centres of activity."

Benefits of such an approach to managing the Earth system include:

- the possibility for immediate action at different scales—rather than a need to wait for global accord,

- the facilitation of widespread experimentation and learning at multiple scales—rather than the need to determine an effective approach prior to rolling out global initiatives,

- the flexibility to encompass different centres of decision-making which are formally separate —creating a bridge that is necessary to achieve change, and most of all

- the ability to engage people in whatever scale of activity they can focus on.

The Application of Management Accounting Theory to Establish a Common Empirical Foundation for Various Environmental Challenges

Management accounting theory highlights the importance of measuring and monitoring the performance of assets and the resultant flows in order to make informed decisions. Management accounting focuses on preparing statements, reports, and documents that help management in making better decisions related to their business' performance. Management accounting today has wide applicability, from strategic cost management to strategic business analysis encompassing areas of environment, society and governance (ESG).

Environmental management accounting (EMA) can be defined as the identification, collection, estimation, analysis, internal reporting, and use of materials and energy flow information, environmental cost. information, and other cost information for both conventional and environmental.

Environmental Impact Assessment (EIA) is the quantification of environmental damage from human activity. Environmental management accounting is the measurement and monitoring of environmental impacts over time, often against targets that can be standards or limits required to be met. EIA is a critical element in managing the impacts of human activity on the environment. It is now possible to estimate the environmental impacts of not only past and present but also future activities with increasing levels of accuracy. Thus, decision making, planning, policy, and legislation can all be made with some understanding of the corresponding environmental implications. For this reason, EIA is common practice for many businesses, cities, and nations and can also be undertaken to evaluate the impact of individuals, groups of people, or products and services.

Environmental limits or standards are not new; for example, the use of environmental footprints and/or life cycle assessments to help manage the global environment is commonplace. An example is the Ecological Footprint, a measure of human use of natural capital compared to the corresponding biological capacity—or available natural capital. This framework is used to assess the impacts of most nations and has been used in other smaller-scale applications, such as the development of an online personal impact calculator.

The primary shortcoming of using environmental footprints, footprint families, and EIA in general to manage impacts is that the results are rarely given in the context of science-based targets. Targets are often self-selected. They are typically based on a percentage improvement from a previous reporting period, sectoral commitments (for example, national commitments to meet carbon targets), or using sectoral or industrial benchmarks.

Carbon Emissions and Sequestration (CES) accounting is a strand of environmental management accounting where global limits are often considered. There are debates as to a "safe" level of global warming and therefore the maximum allowable CO2 emissions. Nonetheless, it is possible to link CO2 emissions for an activity with a global budget based on scientific knowledge (Ratnatunga, et. al., 2011).

CES accounting has led to a widespread understanding of what is a relatively complicated scientific problem. It is used across different sectors and at different scales of activity. Individuals and communities can calculate their "carbon footprint"—the amount of CO2 released due to the activities of the individual or community. Formal greenhouse gas accounting protocols have been developed for nations, cities, and products and services. CO2 emissions have been translated into dollar values. Studies have been completed to assess the relative benefits of a carbon tax versus carbon trading. Different approaches for managing emissions and different technologies for reducing emissions or absorbing carbon from the atmosphere have been trialled in different locations and at different scales, allowing for a very rapid uptake of knowledge and development.

CES accounting is a remarkable example of the importance of limits. These efforts at every scale have already led to some success. For example, 'Net-Zero' is a target of completely negating the amount of greenhouse gases produced by human activity—to be achieved by reducing emissions and implementing methods of absorbing carbon dioxide from the atmosphere.

In summary, to better manage the global environment, the results of environmental impact assessments should be compared to absolute limits rather than incremental targets. We can use such an approach to drive systemic change. The PBs are absolute global limits. However, they cannot easily be connected to environmental impact assessments.

The DPSIR Accounting Framework and Obtainable Indicators for Environmental Management Accounting.

The DPSIR (Drivers, Pressures, States, Impacts, and Responses) framework is employed to examine and evaluate the significant and interconnected connections. The PBs have already been used in a number of attempts, at various scales, for accounting in environmental management. There have been multiple endeavours to establish a connection between the PBs and the current environmental assessment frameworks, such as life-cycle evaluations and footprint tools. Based on the PBs, regional and national targets have been created, and EMA reports have been published using these targets.

Nevertheless, the work is fragmented and lacks a holistic focus because the planetary scientists who first proposed the PBs did not intend for them to be disaggregated or scaled. The purpose of the PBs was to provide a clear snapshot of the status quo of critical Earth-system processes based on how these systems are measured globally. They were not meant to define limits for human activity.

There are serious restrictions on all of the works that scale or alter the PBs and use them for EMA targets. For example, none of them correspond to the PB for climate change. There is a wide variation in the indicators selected for biosphere integrity. So much so that it would be very difficult to contrast and compare any of the limits with one another or with the original PB. The markers chosen to measure the integrity of the ecosystem differ greatly. It would be exceedingly challenging to contrast and evaluate any of the restrictions with the original PB or with one another because of this. Perhaps more crucially, none of the adaptations work well outside of the original context in which they were designed. It would be challenging to apply the produced national indicators to the local or regional levels or to convert them into corporate objectives. This implies that even within that nation, different levels of activity would be working towards different targets. The level of effort that has gone into each of the adaptations is high. It would not be practical to repeat such an involved process for every intended use.

Whilst boundaries cannot easily be scaled or used in EMA, the DPSIR framework enables a more precise classification and, therefore, a better understanding of indicators. As such, it can be used to translate indicators from one category to another, as there is a causal relationship between each category.

- *Driver* indicators describe human needs. Some examples of Driver indicators include kilowatt hours of electricity, kilometres travelled, or litres of fuel for transport.

- *Pressures* which result from drivers that flow to the environment. One Pressure indicator resulting from the Driver indicators listed is CO2

- *State* indicators describe the environment. State indicators provide a snapshot of the status quo. Comparing the current State of a given ecosystem to a previous State allows us to understand the influence of human activity on the environment. For example, the change of the State indicator which corresponds to CO2 emissions—the concentration of CO2 in the atmosphere—has allowed us to understand the ramifications of emitting CO2. It is this sort of indicator that is commonly used in *State of the Environment Reporting*.

- *Impact* indicators describe the results of changing environmental States. For example, one of the Impacts of the increased concentration of CO2 in the atmosphere is an increase in average global temperature. Another Impact is species extinctions.

- *Response* is not a category of indicator. Rather, it is included in the framework to show that different types of responses can be linked to different categories of indicators (see Figure 4)

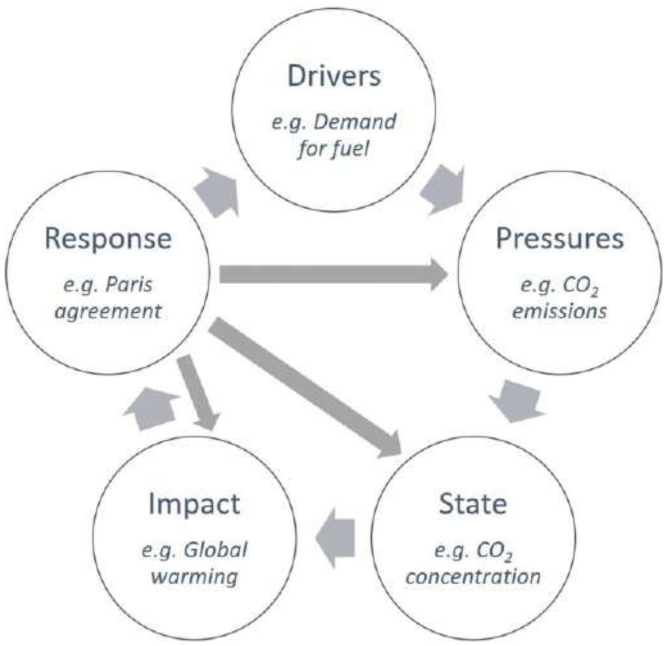


Figure 4: The Driver Pressure State Impact Response Framework

Human activity directly influences Pressures and Drivers and only indirectly influences States and Impacts. As a result, State and Impact indicators are helpful for characterising the current situation and tracking changes over time.

There is no straightforward way to divide the responsibility for the concentration of CO2 in the atmosphere between different nations, cities, regions, or individuals unless a different indicator can be found that is easily scaled. Nor can one directly compare specific human activities to the global average temperature. An individual deciding whether to take the car or train to work, or a local government deciding whether to proceed with certain infrastructure—neither could begin to estimate the impacts of these decisions on the atmospheric concentration of CO2. It is only when these indicators are translated to a Pressure indicator (e.g. CO2 emissions) that it becomes possible to begin to allocate this global budget between nations, cities, or any other level.

These indicators are, nevertheless, difficult to connect to human activities. Until a suitable, easily scalable indicator is discovered, there is no simple method to determine the responsibility for the concentration of CO2 in the atmosphere to different countries, cities, regions, or individuals. Neither can particular human actions be directly compared to the average global temperature. A person choosing to drive or use public transportation to work, or a local government choosing to move forward with a certain piece of infrastructure, could not begin to calculate the effects of these choices on the amount of CO2 in the atmosphere. It is only when these indicators are translated to the Pressure indicator – CO2 emissions, that it becomes possible to begin to allocate this global budget between nations, cities, or any other level.

Developing the Planetary Quotas

The Planetary Boundaries are presented as distinct control variables with explicit limits. This is by design to make them easily communicable. In practice, there is a high level of interconnectivity between the PBs. For example, almost every PB affects biosphere integrity. Exceeding one PB affects our ability to remain within others.

This interconnectedness of PBs needs to extend to the Planetary Quotas (PQs) in order for them to be a reliable translation of the PBs. Translating each PB into a PQ without taking into account the other PBs and PQs would not be appropriate.

There are many pressures that only have minor contributions towards the PBs; therefore, Meyer & Newman (2018) applied an exclusion protocol for pressures that contributed less than 1% towards current global impacts. Excluding minor impacts is common practice in environmental assessment protocols as a means to simplify the process with minimal effect on the results. In total, thirty-two critical pressures were found. These were then analysed to determine which of the pressures could be grouped, and to find appropriate Pressure indicators to assess them with. The result was ten Pressure indicators, which formed the basis of the PQ development.

Each of the PQ indicators found corresponds to one or more of the critical pressures and, therefore, one or more PB(s). The PQ limits were thus determined by assessing each of the corresponding PBs and selecting the most stringent limit.

Figure 5 illustrates how the PBs are translated to pressures and then to PQs. Figure 6 illustrates the direct relationship between the PBs and PQs. Two of the Planetary Boundaries have previously been identified as “core boundaries” for their high level of interconnectivity: Climate Change and Biosphere Integrity. Each of these correspond to more than half of the Planetary Quotas (see Figure 6).

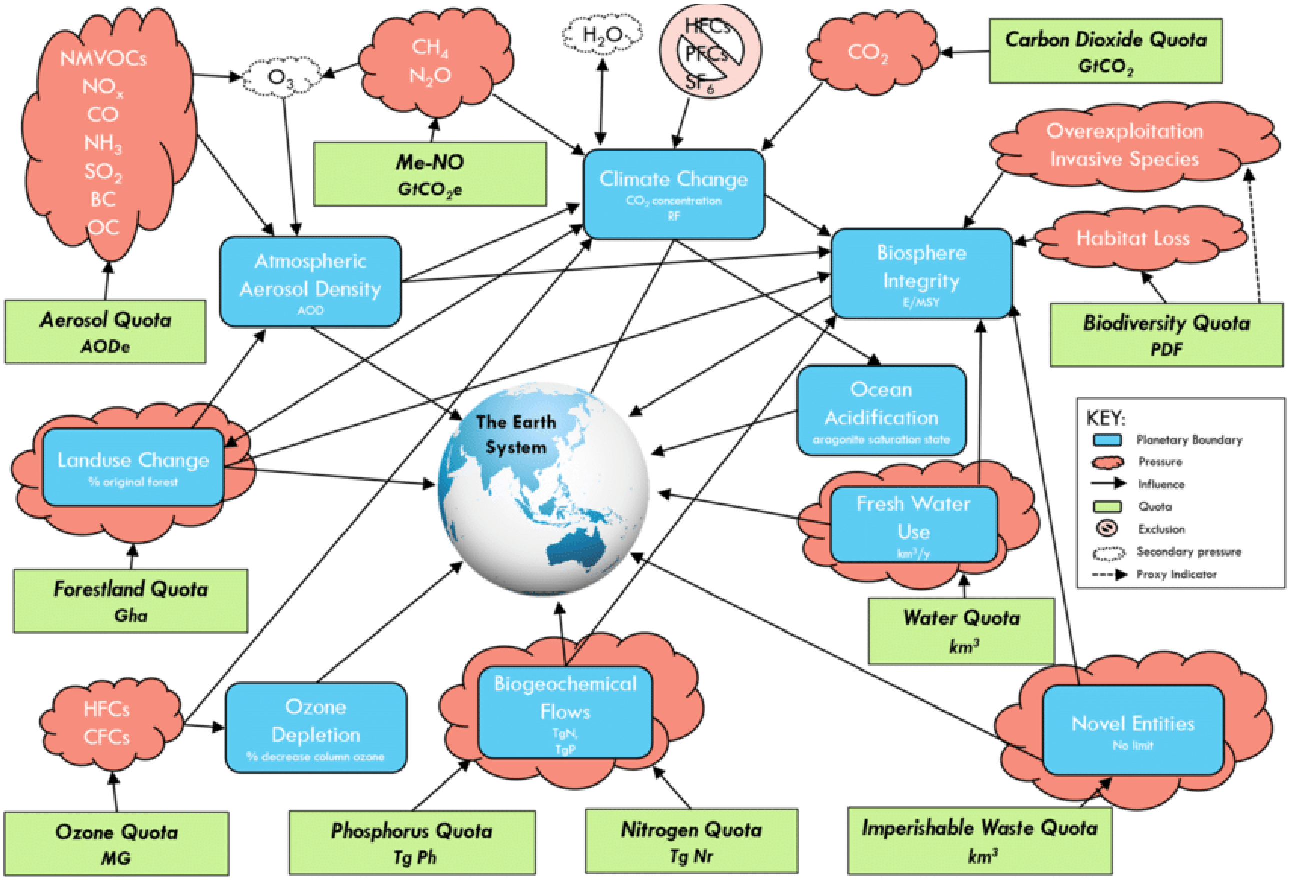


Figure. 5. Translating Planetary Boundaries to Critical Pressures and then to Planetary Quotas

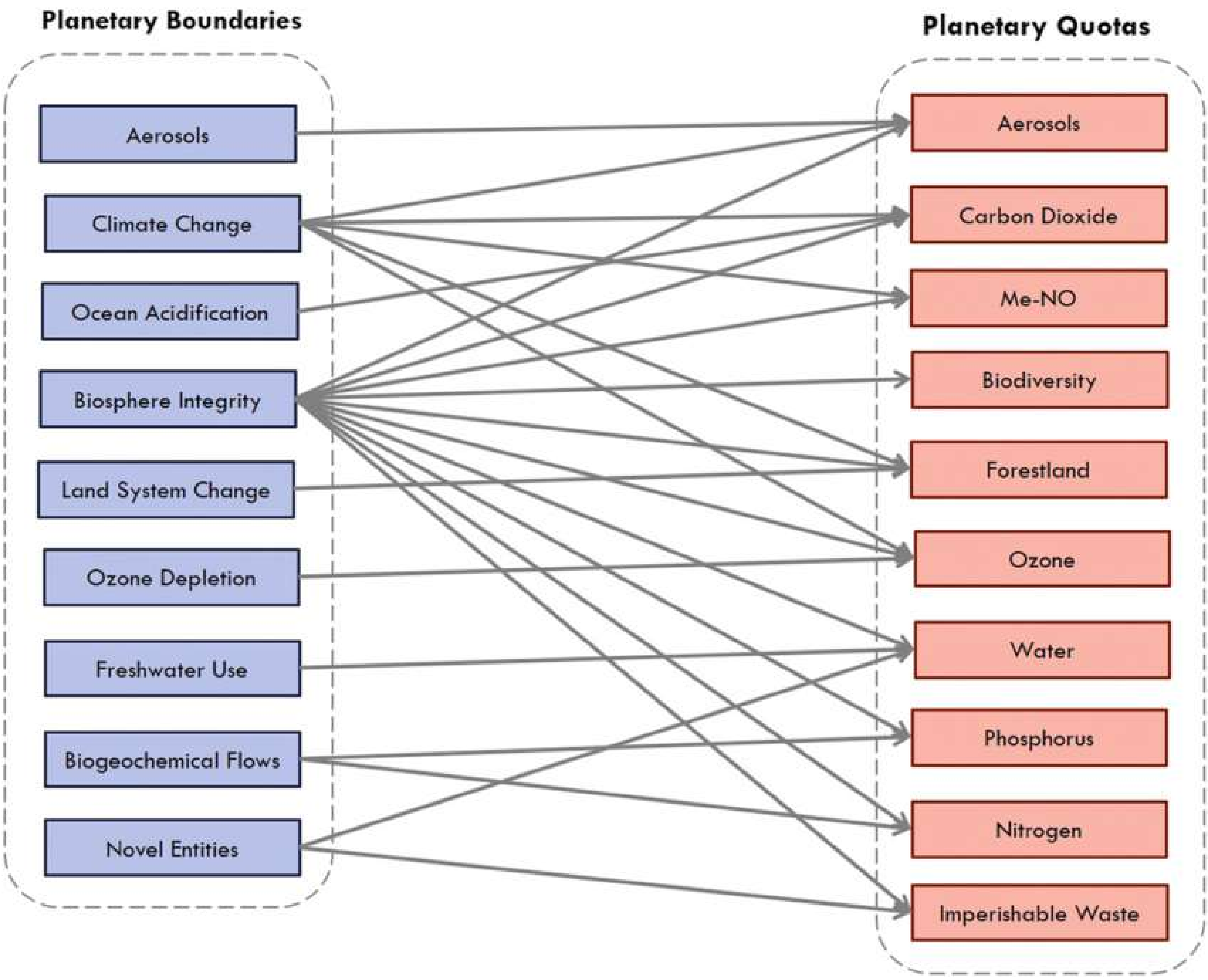
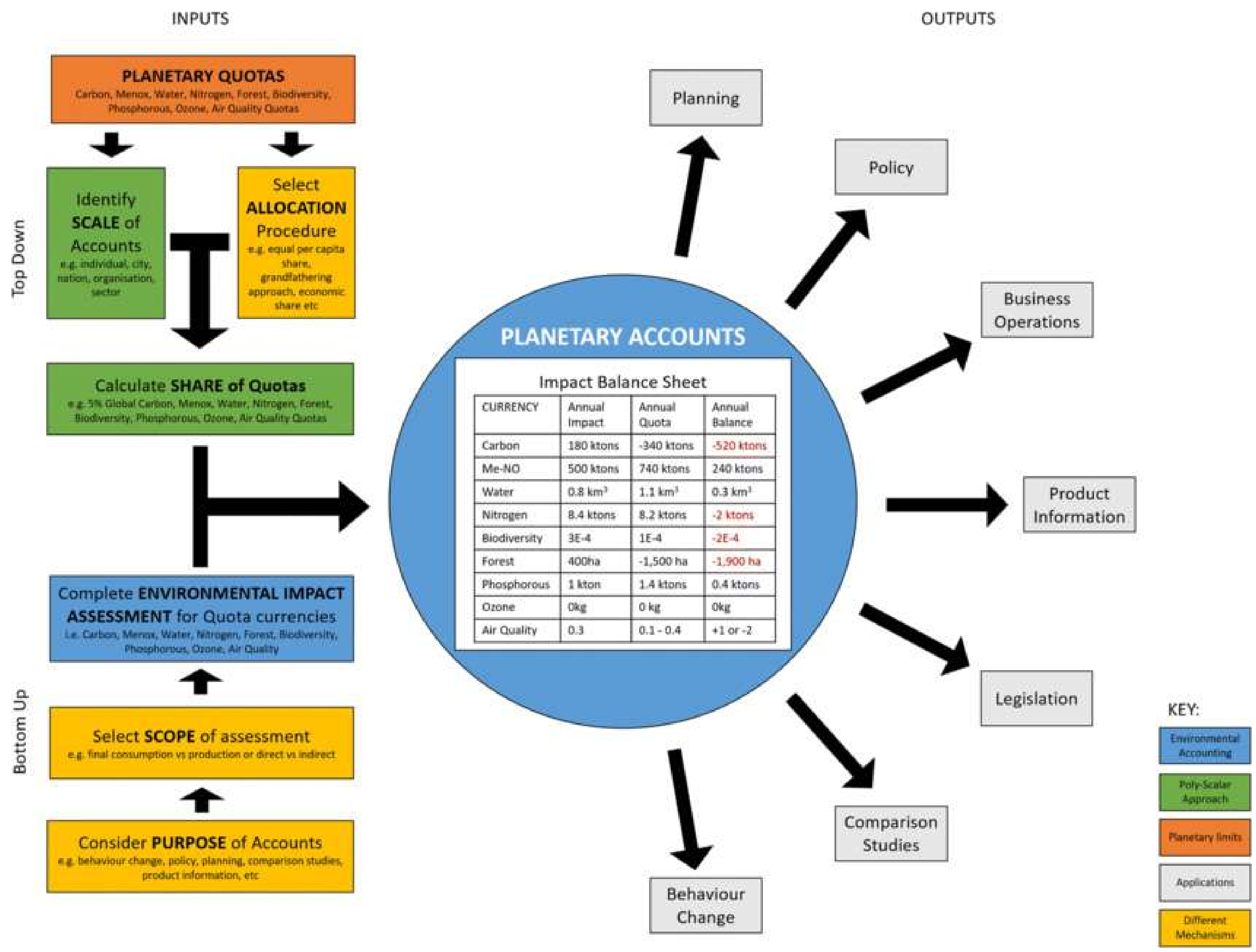


Figure 6: The relationship between the Planetary Boundaries and Planetary Quotas

The Planetary Management Accounting Framework

The Planetary Quotas form the foundations for the new Planetary Management Accounting Framework (PMAF). The PMAF shows how the PQs can be used in a poly-scalar approach to manage global impacts. It can be used to assess the impacts of different scales of human activity against planetary limits. Figure 7 shows how the Framework can work for different scales and purposes.



CURRENCY	Annual Impact	Annual Quota	Annual Balance
Carbon	180 ktons	-340 ktons	-520 ktons
Me-NO	500 ktons	740 ktons	240 ktons
Water	0.8 km³	1.1 km³	0.3 km³
Nitrogen	8.4 ktons	8.2 ktons	-2 ktons
Biodiversity	3E-4	1E-4	-2E-4
Forest	400ha	-1,500 ha	-1,900 ha
Phosphorous	1 kton	1.4 ktons	0.4 ktons
Ozone	0kg	0 kg	0kg
Air Quality	0.3	0.1 - 0.4	+1 or -2

Figure 7: The Planetary Management Accounting Framework (figures are for visualisation purpose only)

The left-hand side shows the inputs, and the right-hand side shows the outputs. The inputs are both top-down – scaling the Planetary Quotas to the scale of assessment – and bottom up – using environmental impact assessment methods to estimate impacts in each environmental activity.

Summary

Planetary Management Accounting is a novel framework that could facilitate an unprecedented, global, multi-scaled approach to managing the Earth system. Environmental management accounting has advanced to the point that we can estimate what the environmental impacts of an activity are or will be. Three theories: (1) Management theory; (2) Management Accounting theory and (3) Environmental management accounting theory have been advanced in the literature, but these have been disconnected from one another. The Planetary Management Accounting Framework based on the new Planetary Quotas brings these three theories together.

References

Hardin G. (1968), "The tragedy of the commons". *Science*. 162:1243–8.

Meyer. K. & Newman, P. (2018), "The Planetary Accounting Framework: a novel, quota-based approach to understanding the impacts of any scale of human activity in the context of the Planetary Boundaries", *Sustainable Earth*, 25 October, 1(4), https://sustainableearthreviews.biomedcentral.com/articles/10.1186/s42055-018-0004-3#

Newman P. (2005) "Can the magic of sustainability revive environmental professionalism?" *Greener Management International*, 49:11–23.

Ratnatunga, J., Jones, S., and Balachandran, K.R (2011) "The Valuation and Reporting of Organizational Capability in Carbon Emissions Management", Accounting Horizons, 25(1): 127-147.

Rockström J., et al. (2009), "Planetary boundaries: exploring the safe operating space for humanity". *Ecology and Society*, 14, 32.14:32.

Skinner B.J. (2011), "The blue planet: an introduction to earth system science / Brian J. Skinner, Barbara Murck. 3rd ed. Hoboken: Wiley.

Steffen W. et.al., (2015), "Planetary boundaries: guiding human development on a changing planet". Science. 347:1259855.

LAWYERS, ACCOUNTANTS AND REAL ESTATE AGENTS: FINALLY SUBJECT TO MONEY LAUNDERING LAWS?

Prof. Janek Ratnatunga, CEO, CMA ANZ

Buying a home in Australia? Hopefully you will soon not have as much competition from drug dealers, corrupt officials and criminals with dirty money due to proposed new laws and a boost to enforcement. But the lobby groups are at work to prevent this legislation passing.

For decades Australia has lagged the world in anti-money-laundering legislation, meaning real estate agents, lawyers, accountants and dealers in precious metals and stones did not have to report suspicious transactions or do "due diligence" — i.e. Know Your Customer (KYC) checks — on their clients.

As far back as April 2021, I wrote an On Target CEO Blog on 'Money Laundering' where I reported that Australia's financial crimes watchdog the Australian Transaction Reports and Analysis Centre (AUSTRAC) was concerned that lawyers and real estate agents were being used for money laundering purposes (Ratnatunga, 2021).

At that time, there was some evidence that laundered money was being 'integrated' in the trust funds of lawyers, accountants, and real estate agents (referred to as Tranche 2 entities) to buy legitimate assets such as real estate and share investments. Some of these professionals were being unwittingly used to avoid money laundering detection; but there were also those who were intentionally involved in criminal activity.

These concerns were raised in October 2020, following reports in the media in Australia and USA revealing how a secretive international operation was targeting dozens of Australian taxpayers to use a Puerto Rican bank, Euro Pacific, co-owned by American celebrity business figure Peter Schiff (Galloway, 2020).

The revelations sparked renewed calls from financial crime experts for the Australian federal government to introduce long-stalled laws that would force lawyers, accountants, and real estate agents to report their clients to authorities if they move money in a suspect fashion, including offshore.

At that time (2021), the Australian federal government was again considering whether to introduce the "tranche 2" laws, after lawyers, accountants, and real estate agents successfully lobbied for the regulations not to apply to them in 2018. If this legislation were passed, it would have included a requirement to submit suspicious matters and transaction reports. However, the lobby groups once again successfully prevailed in 2021, and stalled the legislation.

Legislating Tranche 2 Global AML rules: The History of Resistance

In 2003, Australia agreed to implement comprehensive 'Tranche 2' global AML rules covering so-called real estate gatekeepers: accountants, lawyers, and real estate agents. Unfortunately, passing legislation to implement these rules has been continually postponed by Australian Federal Governments (with Prime Ministers from both the Liberal and Labor parties) due to strong pushback from the same industries that would be subject to the regulation.

This resulted in the global AML regulator, the Paris-based Financial Action Taskforce (FATF), issuing a warning in 2015 that large sums of money were being laundered through Australian residential housing, mostly from China. As such, the FATF urged Australia to implement AML regulations to bring real estate gatekeepers under regulatory scrutiny. The FATF again warned before the Covid pandemic that large sums of money were "*suspected to be laundered out of China into the Australian real estate market".*

Likewise, *the Australian Transaction Reports and Analysis Centre (AUSTRAC) warned that "laundering of illicit funds through real estate is an established money laundering method in Australia".*

All of these warnings fell on deaf ears.

In 2023, it was estimated that billions of dollars have been laundered through Australian homes over the past two decades, primarily by Chinese nationals (van Onselen, 2023).

Fast Forward to 2024 – Can Australia close the loopholes?

Like Groundhog Day, the current Australian Federal Labor Government under Prime Minister Anthony Albanese is undergoing another industry consultation process on the Tranche 2 AML laws.

Anti-Money Laundering (AML) Laws

Australia has some of the weakest anti-money laundering (AML) laws in the world, which has made Australian housing an easy conduit for laundering dirty money

Today, out of more than 200 countries, Australia is still, alongside China, Haiti, Madagascar and the United States, one of the very few countries that have not regulated 'Tranche 2 entities' (accountants, lawyers, and real estate agents).

As such, in a speech to the National Press Club in May 2024, Australian Attorney-General Mark Dreyfus said Australia is now at risk of being "grey-listed" by the International Financial Action Task Force (FATF) for failing to meet global standards.

"Australia is continuing to fall behind global standards on anti-money laundering and counter terrorism financing measures, with cash, banks, luxury goods, real estate and casinos providing continued channels for money laundering." (Chau and Khadem, 2024).

In June 2024, the government began the next stage of consultation on reforms to Australia's anti-money laundering and counterterrorism financing regime, aiming to reduce the criminal abuse of our financial system after what the attorney-general called "*nearly a decade of inaction by the former government*."

AUSTRAC will get $166.4 million in the budget to help affected professions abide by the new laws. and to support industries to meet their obligations. This will mean, for example, education programmes for real estate agents on what to do when they are confronted with a suspicious transaction (Ziffer, 2024).

Transparency International Australia (TIA) has welcomed the government's reforms. Clancy Moore, CEO of TIA, said:

"*Financial crime impacts all of us. When kleptocrats, criminals and corrupt officials hide their ill-gotten gains in Australia, it robs local communities of money for essential services and distorts our economy. Too often, lawyers, accountants, and real-estate agents choose to look the other way, actively support, or unknowingly enable criminals to launder their proceeds of crime in Australia. It's time to close this massive loophole in Australia's financial system."*

The 'Golden Ticket' Visa Scheme

In addition to weak AML laws, Australia has a the 'golden ticket' visa scheme, which was introduced by former Labor Treasurer Chris Bowen in 2012 and has operated for 10 years with near zero rejections. These 'golden ticket' visas grant automatic permanent residency in Australia, and unlike other visa classes, no English language proficiency is necessary. Chinese citizens make up 90 per cent of successful applicants. And over 20,000 Chinese have been approved for the Significant Investor Visa scheme, which requires a $5 million minimum commitment.

The "golden ticket" visa scheme has also facilitated money laundering. Anti-corruption campaigners have long lobbied for these visas to be abolished, claiming that corrupt officials

are using them to enter Australia and launder funds. Australia's Productivity Commission has also called for the 'golden visa' programme to be axed, noting they are conduits for laundering 'dirty money' into Australia (van Onselen, 2023).

Other developed countries have already discontinued similar 'golden ticket' visa programmes, which, when combined with Australia's lax AML rules, have made Australian real estate an easy conduit for laundering funds (Onselen, 2023).

Resistance from the Real-Estate Industry

Implementation of these rules could result in more than 100,000 real estate gatekeepers being subject to AML regulation, which has caused another round of fierce pushback from the impacted industries.

These vested interests defeated similar stakeholder consultations in 2008, 2010, 2012, 2014, and 2017. And there is the concern that they will be successful again, delaying the implementation of the global AML rules first agreed by Australia in 2003 into the never-never.

As expected, the lobbying has recommenced, with the Real Estate Institute of Australia (REIA) cautioning against changes to money laundering laws, saying that the federal government needs to be careful not to hurt businesses as part of its crackdown on money laundering.

REIA Deputy President Hannah Gill said that introducing blanket compliance requirements on all real estate businesses appears once more to be '*taking a sledgehammer to a walnut*'.

"The Attorney General himself has said today that he has no knowledge and there is no evidence to substantiate that money laundering is driving house price growth. The last thing we want is Australian homes falling into the hands of sophisticated criminals with legitimate buyers who are hardworking Australian families and individuals missing out." (Khadem, 2024).

The Money Laundering Process in Australia

Money laundering is the process of making illegally gained proceeds ("dirty money") appear legal ("clean"). In Australia, historically, most of its anti-money laundering laws linked money laundering (which is concerned with the source of funds) with terrorism financing (which is concerned with the destination of funds) when regulating the financial system. Using 'dirty-money' obtained overseas to purchase Australian property has been seen as good for economic growth. The only concern of some state governments was that the prices of real estate are rising astronomically as foreign buyers with deep pockets are outbidding local (voting) families who may vent their frustration at the polling booths.

In essence, money laundering involves three steps: '*placement*', *'layering', and 'integration'.*

First, the illegitimate funds are introduced into the legitimate financial system (placement). Then, the money is moved around to create confusion, sometimes by wiring or transferring through numerous accounts (layering). Finally, it is brought into the financial system through legitimate looking transactions — such as buying real estate — until the "dirty money" appears "clean (integrated).

The 'placement' of dirty money can take several forms, although most methods can be categorised into one of a few types. These include "bank methods; smurfing (also known as structuring); using legitimate cash businesses (such as casinos); currency exchanges, and double invoicing". 'Bulk cash smuggling' involves physically smuggling cash to another jurisdiction and depositing it in a financial institution, such as an offshore bank, with greater bank secrecy or less rigorous money laundering enforcement.

Often, a corporate entity is used for 'placement' either knowingly or unknowingly, using the following vehicles:

- *Shell companies and trusts:* Trusts and shell companies disguise the true owner of money. Trusts and other corporate vehicles, depending on the jurisdiction (such as in the State of Delaware, USA), need not disclose their true, beneficial owner. Such companies are sometimes referred to as ratholes.

- *Controlled Foreign Corporations:* Here, money is deposited in a controlled foreign corporation offshore, preferably in a tax haven where minimal records are kept, and then shipped back as a foreign direct investment, exempt from taxation. This is called 'round-tripping'. A variant on this is to transfer money to a law firm or similar tranche 2 entity, as funds on account of fees, then to cancel the retainer and, when the money is remitted, represent the sums received from the lawyers as a legacy under a will or proceeds of litigation.

In Australia, the most common form of money laundering is where corporations or individuals purchase real estate with illegal proceeds obtained overseas and transferred to a tranche 2 entity (lawyers, accountants, or real estate agents) to purchase a property. Often, this is the final resting place of the dirty money.

However, there are those who want 'clean cash' rather than real estate. In such cases, the tranche 2 entity makes arrangements to sell the property. The proceeds from the sale look like legitimate income. Alternatively, the price of the property is manipulated, with the seller agreeing to a contract that underrepresents the value of the property and receives criminal proceeds to make up the difference.

Case Study

Despite the objections from the Real Estate Institute, the problems caused by international money laundering are far from theoretical. A new report from *Transparency International Australia* reveals millions of dollars of dirty money could be flowing from the impoverished nation of Cambodia to Australia annually, with gaps in the law-making Australia's real estate sector an attractive destination for money laundering.

According to the advisory firm KordaMentha's report, Cambodian foreigners settled 118 properties worth a total of $110 million in Australia in the five years leading up to 2022 (Ziffer, 2024).

To give a sense of scale, in 2020, more than $516 million in total funds were transferred from Cambodia to Australia. Much of it could be legitimate financial activity or investment. But the value of money flowing from Cambodia is vastly disproportionate to the nation's wealth — just under 1 percent of Cambodia's gross domestic product. (The average income in the authoritarian state is just $1,690 annually).

Although Cambodia is an incredibly poor country with lots of people living in poverty, it is also a regional hub for money laundering, human trafficking, and the drug trade as well. So that amount of money coming in is quite concerning. It raises serious red flags as to the source of those funds. As such, those who work in the field have welcomed the news that greater diligence will be required by Tranche 2 entities in the future when suspicious transactions are made.

KordaMentha partner Alice Saveneh-Murray, who works in the field of financial crime, says signing up to Tranche 2 laws will make the nation safer.

"This brings into focus the regulatory gaps in Australia's regime and how AML/CTF reform will bring Australia closer to being compliant with its international obligations. We know that this issue is not isolated to Cambodia and the Asia-Pacific region, but our research clearly emphasises the need to take urgent steps to reduce the risk of Australian real estate being used by criminals for money-laundering and terrorism financing, as well as in other industry sectors that will be covered by the AML/CTF tranche 2 reforms proposed by the government." (Ziffer, 2024).

Summary

The Albanese government needs to break the 20-year cycle of stonewalling and implement the Tranche 2 AML rules once and for all.

The government should also follow the Productivity Commission's recommendation to scrap the 'golden ticket' visa programme, as well as ban temporary migrants from purchasing established Australian homes.

Otherwise, locals will continue to be priced out of housing by foreigners, and Australian housing will remain a global magnet and shelter for dirty laundered money.

Money laundering is a real risk not only in the banking and finance institutions, but also in the legal, accounting, and real estate professions. Effective Know-Your-Customer (KYC) protocols are a vital part of any anti-money laundering (AML) regime.

It is therefore refreshing that a crackdown on money laundering has been proposed so that real estate agents, lawyers, and accountants will need to report suspicious transactions. If passed by the Australian Parliament, such laws will bring Australia into line with similar nations and stem the process of criminals converting illegal profits into money that looks legitimate.

When done right, KYC processes can help financial institutions better understand and manage their risks and prevent money laundering. However, it is one thing to have strong KYC guidelines on paper and another to implement them. Therefore, it is good that AUSTRAC will get A$166.4 million in the budget to help affected professions abide by the new laws.

The question is, will the lobby groups be successful once again in stalling the legislation?

References

Chau, David and Khadem, Nassim (2024), "As it happened: Lawyers, accountants, real estate agents target of new money laundering laws", abc.net. July 9. https://www.abc.net.au/news/2024-07-09/asx-markets-business-live-news/104073806, accountants, real estate agents target of new money laundering laws

Galloway, Anthony (2020), "Lawyers, accountants and real estate agents should report suspicious activity: AUSTRAC boss", The Age, Business, October 23, p.1,28.

Khadem, Nassim (2024), "'Sledgehammer to a walnut': REIA cautions against changes to money laundering laws" abc.net. July 9. https://www.abc.net.au/news/2024-07-09/asx-markets-business-live-news/104073806, accountants, real estate agents target of new money laundering laws

Ratnatunga, Janek (2021), "Money Laundering: Traditional vs. Digital: Key Lessons for Bankers and Finance Professionals", On Target, April 27. https://ontarget.cmaaustralia.edu.au/money-laundering-traditional-vs-digital-key-lessons-for-bankers-and-finance-professionals/

van Onselen, Leith (2023), "Reason millionaires are flooding into Australia", news.com, November 16. https://www.news.com.au/finance/economy/australian-economy/reason-millionaires-are-flooding-into-australia/news-story/4df3f345449e347042b98624e1327148

Ziffer, Daniel (2024), "New laws to stem drug dealers, corrupt officials and dirty money from heating up Australia's real estate market", abc.net, May 6. https://www.abc.net.au/news/2024-05-06/new-laws-to-stem-money-laundering-through-real-estate/103800070

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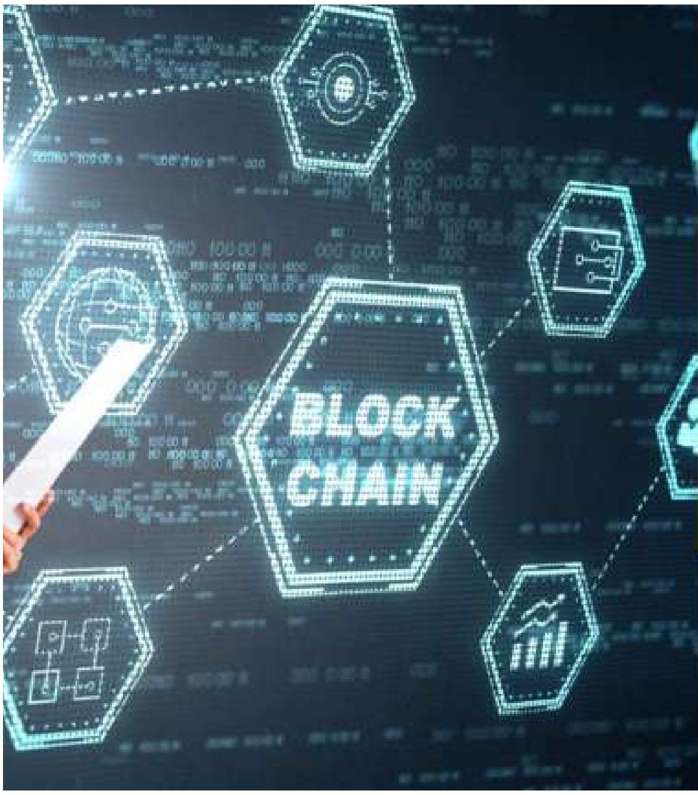

SHADOW CONSULTING:
AUSTRALIAN PUBLIC SERVICE 'INFILTRATED' BY BIG 4.

Dr. Chris D'Souza , Deputy CEO of CMA (ANZ)

"Many years ago, there used to be something called 'conflict of interest.' No longer, I'm afraid. Today, we all bathe in the same river."— Gore Vidal, The Last Empire: Essays 1992-2000

The final report of a Senate investigation that was sparked by the PwC incident is now out. The report, prompted by the PwC tax leaks scandal and concerns over the extensive use of consulting firms by the Australian government, presents a comprehensive examination of the issues and proposes a series of recommendations.

Interestingly, much of the issues highlighted in the Report have been covered over the years by CMA(ANZ) CEO Professor Janek Ratnatunga, in his CEO Blog as shown in this article.

The inquiry was initiated due to revelations in early 2023 that PwC had leaked sensitive Australian government information to major corporations, including Google (Ratnatunga, 2023a).

The final report goes well beyond this initial revelation. The Senate investigation has looked into the PwC issue as well as the general usage of consulting firms by government agencies. It highlights Australia's disproportionate spending on consultancy services compared to other countries, noting that the Big Four consulting firms that come from accounting and audit origins (Deloitte, EY, K PMG, and PwC) dominate this sector. Well before the Senate report, many academics have called the government to seriously regulate the Big Four (Ratnatunga, 2023a) and the non-accounting consulting firm, McKinsey and Company (Ratnatunga, 2023b)

Background and Context:

The Senate investigation, which started in March of last year, focused on the interactions between consulting businesses and the larger Australian public sector. At first, it concentrated on allegations that PwC participated in internal government conversations and utilised this private knowledge to assist its clients in creating tax minimisation plans. Then-CEO Tom Seymour resigned as a result of the stunning revelations that were reported by the Australian Financial Review (Belot, 2023)

Not only is every Australian impacted by this problem, but tax avoidance is also a global problem that affects many economies, especially developing ones. Avoiding corporate taxes damages the budget's financial position in impacted countries. Less money will be available for cost-of-living assistance, hospitals, pensions, and schools. PwC's efforts were geared to reducing the amount of tax that private companies have to pay, not only in Australia, but globally. Taxpayers would have been forced to pay more or governments would have run a bigger deficit if it had gone undiscovered.

Interim Reports

The two critical interim reports came before the final report. In the first report, under the heading "A calculated breach of trust," the company was charged with improperly hindering the investigation.

According to the second report, "The cover-up worsens the crime," PwC did, in fact, misuse secret government information. It also stated that PwC's failure to truly reform is evidenced by the firm's failure to be fully transparent and honest in accordance with the committee's recommendations from its first report.

In fact, the Senate committee could not see how PwC can rebuild its credibility while it keeps hiding things.

Clearly, PwC's culture needed to be altered, according to the interim assessments. It is also true that these reports have already resulted in PwC losing one CEO.

Key Findings and Recommendations: of the Australian Senate Final Report

The major finding in the final report is that there has been an increased reliance on consultants, and that this has hindered the growth of the Australian Public Service (APS), raised concerns about conflicts of interest, and prompted questions about the transparency and value for money of consultancy work (Bartos, 2024).

Government expenditure on consultants has risen significantly, tripling between 2010 and 2020 and reaching $2 billion under the previous Morrison government in 2021-2022 (Khadem, 2024).

Among the recommendations were:

- Transparency and Accountability: Publish the names and positions and other detailed information about those involved in the breach of confidential government information.

- Contractual Reforms: Introduce clauses in government contracts requiring consulting firms to prioritize the public interest in their service delivery. Contracts to be designed to ensure "transfer of knowledge" from consultants to public servants. The government's Supplier Code of Conduct to include a requirement for service providers to act in the public interest and follow professional standards that align with "public sector values".

- Financial Reporting: Mandate the Minister for Finance to publish biannual reports detailing all consultancy contracts worth $2 million or more, including contract details and any conflicts of interest. The report recommends that the Senate adopt a resolution requiring the finance minister to present biennial reports on public sector expenditures for consulting agreements totalling at least A$2 million.

- Conflict of Interest Management: Establish a central register for breaches of conflicts of interest by contracted parties. the Department of Finance guidelines require government contracts to include a clause stating consultants have a duty to act in the public interest when doing government work and have better training for officials doing procurement work

- Legislative Review: Review legislative frameworks and partnership structures, particularly focusing on partnerships with over 100 partners. [Concerns were raised about the opacity and regulatory oversight of large partnership structures within consulting firms, suggesting they may facilitate tax avoidance and need more stringent scrutiny or regulation.]

- Training Enhancement: Improve training for APS officials involved in procuring consultancy services to ensure better value-for-money assessment. As discussed above, the report mentioned that, during the previous 30 years, the growth in consulting expenses has almost tripled per decade.

- Separation of Audit and Consultancy. Separate auditing and consultancy services. There is a call for broader reforms in the consulting industry, potentially separating auditing and consultancy services to prevent conflicts of interest and improve regulatory oversight (See Ratnatunga, 2019).

Critique of the Final Report

In the wake of the interim reports, does the final report allay our concerns? We do not think so. In fact, the committee members "remain concerned," according to the final report, and that PwC still did not provide enough transparency regarding the specifics of the incident.

Note that this report is just the beginning. It is fair in that it acknowledges that hiring consultants is not always the right decision. It is also encouraging to see the ideas for greater transparency.

That being said, it is a little too naive to assume that consulting firms will adhere to professional standards that are consistent with "public sector values." In fact, on the notion that contracts ought to mandate consultants' actions to serve the public interest — most consultants say they already do this.

In general, the report states that systemic issues still exist because the public service has lost important abilities, consulting firms have become so important in public life that government departments now rely too much on them. As a result, Australia is in considerably worse shape because its public service today is no longer able to perform tasks that the public service once could. This was caused in part by public service budget cuts. However, some governments held the ideological view that hiring experts from the private sector was a good idea without fully appreciating the hazards.

One significant step towards resolving the issue would be to impose limitations on public employees' ability to work for private consulting firms after leaving the government. As things stand, however, there is a strong incentive for those public employees to award the consulting firms extremely expensive contracts so they may later take jobs with the same firms. In this case, there is a clear conflict of interest and financial risk to the government.

The current report acknowledges that the “revolving door” phenomenon is a problem, but it offers no concrete suggestions for resolving it. It’s likely that using consultants excessively will remain an issue.

Critics, including Senator Barbara Pocock of the Australian Greens party, argue that the recommendations do not go far enough. They propose stricter measures such as banning firms involved in scandals from government contracts, reducing external service spending by departments, and enforcing a cooling-off period for personnel moving between government and consultancy firms.

Response and Future Steps:

In conclusion, the Senate committee’s report underscores the need for significant reforms in how government contracts with consulting firms are managed, aiming to restore public trust, enhance transparency, and ensure effective use of taxpayer funds in Australia’s public sector operations.

There is no certainty, however, that any of the report’s recommendations are certain to be put into practice. It is not necessary for governments to take the Senate recommendations seriously. In actuality, Australia is still awaiting the adoption of all of the recommendations made by the Banking Royal Commission, which presented its final report in 2019 (see Ratnatunga, 2018), as well as the major recommendations made by the Royal Commission into Aboriginal Deaths in Custody in 1991.

Over the past several years, there has been a noticeable shift away from public sector workers towards greater reliance on private consultants. Rebuilding the capacity and expertise within the public service will be a long, arduous process that will take decades to achieve. We must manage our expectations and recognize that there are no quick or easy solutions.

And finally, we must ensure that these decisions are not influenced by the Big four and lobby groups with deep pockets!

“After overcoming the conflict of interest, one can realize and understand the public interest; it builds and reaches the plan of welfare action.”— Ehsan Sehgal

References

Bartos, Stephen (2024), “‘We remain concerned’: Senate inquiry into PwC tax scandal calls for reform, but overuse of consultants will likely continue” The Conversation, June 12, https://theconversation.com/we-remain-concerned-senate-inquiry-into-pwc-tax-scandal-calls-for-reform-but-overuse-of-consultants-will-likely-continue-232251

Belot, Henry (2023), “PwC Australia chief executive Tom Seymour resigns in wake of tax policy leak”, The Guardian, May 8. https://www.theguardian.com/business/2023/may/08/pwc-australia-chief-executive-tom-seymour-resigns-in-wake-of-tax-policy-leak

Khadem, Nassim; Hutchens, Gareth and Terzon, Emilia (2024), “Big Four consulting firms ‘operating in the shadows for too long’ as Senate committee demands new rules for government contracts”, abc.net, 12 June, https://www.abc.net.au/news/2024-06-12/big-four-consultancies-new-rules-senate-final-report/103967978 in the shadows for too long’ as Senate committee demands new rules for government contracts

Ratnatunga, Janek (2023a), “PwC Tax Scandal’s Aftermath: It’s Time to Seriously Regulate the Big 4’, On Target, May 18, https://cmaaustralia.edu.au/ontarget/pwc-tax-scandals-aftermath-its-time-to-seriously-regulate-the-big-4/

Ratnatunga, Janek (2023b), “Consulting Firms: Big Bucks but Little Value for Governments” On Target, April, 11. https://cmaaustralia.edu.au/ontarget/consulting-firms-big-bucks-but-little-value-for-governments/

Ratnatunga, Janek (2019), “Auditors to the Slaughter: Why Audit Opinions are ‘Untrue’ and ‘Unfair’”, On Target, August 7. https://cmaaustralia.edu.au/ontarget/auditors-to-the-slaughter-why-audit-opinions-are-untrue-and-unfair/

Ratnatunga, Janek (2018), “The Key Findings of Australian Banking Royal Commission Interim Report: A Summary and Critique”, On Target, October 1. https://cmaaustralia.edu.au/ontarget/the-key-findings-of-australian-banking-royal-commission-interim-report-a-summary-and-critique/

THE REPERCUSSIONS OF EARTH'S OLDEST, TINIEST CREATURES WINNING THE CLIMATE CHANGE BATTLE

Ryan Heneghan

The world's oceans are home to microscopic organisms invisible to the human eye. The tiny creatures, known as "prokaryotes", comprise 30% of life in the world's oceans.

These organisms play an important role in keeping the oceans in balance. But new research by myself and colleagues shows this balance is at risk.

We found prokaryotes are remarkably resilient to climate change – and as a result, could increasingly dominate marine environments.

This could reduce the availability of fish humans rely on for food, and hamper the ocean's ability to absorb carbon emissions.

A fine balance

Prokaryotes include both bacteria and "archaea", another type of single-celled organism.

These organisms are thought to be the oldest cell-based lifeforms on Earth. They thrive across the entire planet – on land and in water, from the tropics to the poles.

What prokaryotes lack in size they make up in sheer abundance. Globally, about two tonnes of marine prokaryotes exist for every human on the planet.

They play a crucial role in the world's food chains, helping support the nutrient needs of fish humans catch and eat.

Marine prokaryotes grow extremely fast – a process that emits a lot of carbon. In fact, prokaryotes to an ocean depth of 200 metres produce about 20 billion tonnes of carbon a year: double that of humans.

This massive carbon output is balanced by phytoplankton – another type of microscopic organism which turns sunlight and carbon dioxide into energy, through photosynthesis.

Phytoplankton and other ocean processes also absorb up to one-third of the carbon humans release into the atmosphere each year. This helps limit the pace of global warming.

How prokaryotes respond to warming is key to understanding how the fine balance of the world's oceans may change in a warmer world. This was the focus of our research.

What we found

We wanted to predict how climate change would affect the "biomass", or total global weight, of marine prokaryotes. We also wanted to examine how it would affect their carbon output.

To do this, we built computer models that integrated decades of observations from dozens of scientific surveys across the world's oceans.

So what did we find? Prokaryotes are likely to be climate change winners, relative to other marine life.

For each degree of ocean warming, their biomass will decline by about 1.5%. This is less than half the projected 3–5% decline we predicted for larger plankton, fish and mammals.

It means future marine ecosystems will have lower overall biomass, and will increasingly be dominated by prokaryotes. This could divert a greater share of available nutrients and energy toward prokaryotes and away from fish, reducing the supply of fish humans eat.

We discovered another important change. For every degree of warming, we predict prokaryotes in the top 200 metres of the world's oceans would produce an additional 800 million tonnes of carbon per year.

This is equivalent to the present-day emissions of the entire European Union (after converting CO_2 to carbon).

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Ryan Heneghan is Lecturer in Environmental Modelling, Griffith University

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https://theconversation.com/earths-oldest-tiniest-creatures-are-poised-to-be-climate-change-winners-and-the-repercussions-could-be-huge-235115

Indonesia

IMAC 2024, with the theme 'Empowering Creativepreneurs: Driving Economic Growth'

IMAC 2024, with the theme 'Empowering Creativepreneurs: Driving Economic Growth' was successfully held on Monday, August 12, 2024 (08:00 AM - 05:00 PM WIB) in a hybrid format via Zoom Meeting and at IPMI International Business School in Jakarta, with a total of 300 participants (100 onsite and 200 online).

The **Welcome Address** was delivered by Prof. Ir. M. Aman Wirakartakusumah, Rector of **IPMI** Business School. The **Keynote Speakers** were Prof Janek Ratnatunga, CEO of ICMA (ANZ), and Dr. Chris D'Souza, Deputy CEO and CFO of CMA (ANZ).

Prof Janek Ratnatunga, delivering his Keynote paper titled, "AI Powered Support: Revolutionising Business Partnering".

Dr. Chris D'Souza, delivering his Keynote paper titled "Entrepreneurship in a Globally Volatile Business World".

The Organising Committee with some of the Participants and Sponsors

At this event, **Drs. Teten Masduki** the current Minister of Cooperatives and Small and Medium Enterprises of the Republic of Indonesia was inducted to **the Global Management Accounting Hall of Fame®** for his significant impact on Indonesia's economic landscape and on his dedication in promoting sustainable development, economic empowerment, transparency, and accountability in advancing the profession in Indonesia.

The Organising Committee with some of the Participants and Sponsors Ir. Siti Azizah, Deputy Minister for Entrepreneurship, receiving the Hall of Fame award on behalf of Drs. Teten Masduki. Others in the picture from L-R are Mr. Nursakti Niko Rosandy, President of ICMA Indonesia, Dr. Chris D'Souza and Prof Janek Ratnatunga from CMA(ANZ) and Prof. Ir. M. Aman Wirakartakusumah, Rector of IPMI Business School

CMA 10 Intensive Face-to-Face Program Completed

Another CMA program was conducted at Ciputra Hotel in Jakarta on August 3-9, 2024. This was the 10th CMA intensive program organised by Dr Ana Sopanah of RAD Indonesia. She was joined by Mr. Daniel Godwin Sihotang of PT Lean Visi Indonesia. The program was facilitated by Professor Janek Ratnatunga, the CEO of ICMA Australia and Dr Chris D'Souza, ICMA COO/CFO.

From Left to Right: Ibu Rere, the program coordinator, Prof Janek Ratnatunga, ICMA CEO and Dr Ana Sopanah of RAD Indonesia showing the 'C" for CMA!

The participants and presenters of the 10th CMA Intensive Program.

The participants of the 10th CMA Intensive Program undertaking the manufacturing simulation game.

Continuing Professional Development (CPD)

CPD Training was also conducted for ICMA members. They undertook Certifiaction programs of the Academy of Finance and Management Australia (AFMA) organised by Dr. Ana Sopanah of RAD Indonesia and Mr. Daniel Godwin Sihotang of PT Lean Visi Indonesia. Dr Chris D'Souza, ICMA COO/CFO conducted the Certified Analyst in Project Management (CAPM); and Prof Janek Ratnatunga, ICMA CEO, conducted the and Certified Environmental & Sustainability Analyst (CESA) seminars. They were undertaken by CMAs as part of their CPD requirements.

Sri Lanka

CMA (Australia) Marks Silver Jubilee in Sri Lanka

The Certified Management Accountants (CMA) Australia is proudly celebrating its 25th anniversary in Sri Lanka this year. The series of year-long celebratory activities has commenced with a grand inauguration event at the Courtyard by Marriott Colombo, featuring the unveiling of a special 25th Anniversary Logo and the event was graced by esteemed attendees, including Mr. Kapila Dodamgoda, CMA Regional Director for Sri Lanka, Mr. Ashan Nissanka, President of CMA Australia Sri Lanka Branch, and current and past Council Members and lecturers.

Unveiling of the 25th year logo. (from left to right) Dr. Chandrani Adikaram Mr. Ashan Nissanka (President - CMA Australia), Mr. Kapila Dodamgoda (CMA Regional Director - Sri Lanka) and Deepal Abeysekera - the first registered candidate for the CMA Graduate Conversion Programme)

The CMA education qualification was introduced in 1999 through a technical collaboration between The Institute of Chartered Accountants of Sri Lanka and CMA Australia and in 2006, the Academy of Finance (AOF) was appointed as the Recognized Provider Institute in Sri Lanka. Over the past 25 years, CMA Australia has made substantial contributions to strategic management accounting education in Sri Lanka. A significant number of top management professionals leading some of the largest corporations in Sri Lanka are part of the CMA Australia alumni, underscoring the institute's pivotal role in shaping the future of the country's corporate leadership.

The Full Team of CMA Australia in Sri Lanka, including seated in the centre, Kapila Dodamgoda (CMA Regional Director) and Ashan Nissanka (President).

As CMA Australia in Sri Lanka celebrates this significant milestone, it looks forward to continuing its legacy of excellence in strategic management accounting education and making a lasting impact on the corporate landscape of Sri Lanka.

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A WARM WELCOME TO OUR NEW MEMBERS (JUN - Aug 2024)

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CMA EVENTS CALENDAR

- September 7-9, 14-15 & 21-22, 2024:
Nineth CMA Global Zoom Program in Strategic Cost Management & Strategic Business Analysis, Syme Business School, Australia. (Zoom).

- September 28-October 6:
4th post-Covid CMA Program Workshop organised by Academy of Finance, Sri Lanka.

- October 12-14, 2024:
Certificate of Proficiency in Strategic Cost Management, SMU Academy, Singapore (12th Intake). (Zoom).

- October 18-21, 2024:
Certificate of Proficiency in Strategic Business Analysis, SMU Academy, Singapore (12th Intake). (Zoom).

- October 26-28 (SCM) and October- 31-3 November 2024:
The 2nd CMA Program Workshop, Bangkok, organised the Thai Federation of Accountants (TFAC) and the CMA(ANZ) Regional Office in Thailand.

- November: 9-17, 2024:
CMA Program Workshop organised by SMART Education Group, Dubai.

- November 20, 2024:
Sri Lanka & International Graduation Ceremony, Galadari Hotel, Colombo

- November 22, 2024:
25th Year Celebratory Dinner of CMA in Sri Lanka. Galadari Hotel, Colombo.

- November 29, 2024:
Australian Hall of Fame Event. Club Pavilion, RACV, Melbourne.

- February 9-14, 2025:
CMA Program Workshop, Jakarta, organised by RAD Indonesia and Lean Visi Indonesia.

- February 22-March 2, 2025:
5th post-Covid CMA Program Workshop organised by Academy of Finance, Sri Lanka.

- March 8-10, 15-16 & 22-23, 2025:
Tenth CMA Global Zoom Program in Strategic Cost Management & Strategic Business Analysis, Syme Business School, Australia. (Zoom).

- March 5-7 & 10-13, 2025:
Certificate of Proficiency in Strategic Cost Management, and March 10-12 2024: Certificate of Proficiency in Strategic Business Analysis SMU Academy, Singapore (13th Intake). (Zoom).

- April 26-May 4, 2025:
CMA Program Workshop organised by SMART Education Group, Dubai.

- August 2-8, 2025:
CMA Program Workshop, Jakarta, organised by RAD Indonesia and Lean Visi Indonesia.

- Aug 30- Sept 1; Sept 6-7 & Sept 13-14, 2025:
Nineth CMA Global Zoom Program in Strategic Cost Management & Strategic Business Analysis, Syme Business School, Australia. (Zoom).

PRIVATE PROVIDERS

Wharton Institute of Technology and Science (WITS), Australia

Syme Business School, Australia

Academy of Finance, Sri Lanka

IPMI (Indonesian Institute for Management Development), Indonesia

Singapore Management University Academy (SMU Academy)

Business Sense, Inc. , Philippines

HBS for Certification and Training, Lebanon

SMART Education Group, UAE

Institute of Professional and Executive Management, Hong Kong

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