STOS Maui Marine Consent Application Hearing, 4 May 2015, New Plymouth

Submission from Catherine Cheung

1. Thank you chairman and the committee for allowing me to speak. I am a relatively recent arrival to New Zealand, lured to this land by its self-proclaimed clean, green, 100% pure image. Soon after arriving, my husband and I were gobsmacked to see the petroleum permit map covering vast areas of New Zealand and over a huge expense of the ocean. That shocking reality is still here. But is there nothing to stop or at least slow down this aggressive expansion of fossil fuel extraction?

2. Reading STOS lawyer Ms Devine's legal submission, I understand that the Supreme Court has emphasised that the definition of "*sustainable management*" should be read as "*an integrated whole*", meaning that clauses (a), (b) and (c) "*must be observed in the course of the management*". Therefore **clauses (b) safeguarding the life-supporting capacity of the environment and (c) avoiding, remedying, or mitigating any adverse effects of activities on the environment, must be observed for sustainable management**, even though minerals are excluded from clause (a).

3. However, Ms Devine also said that the EEZ Act's definition of "*sustainable management*" refers to enabling "*people to provide for their economic wellbeing*" while that in the RMA refers to "*social, economic, and cultural wellbeing…*" She then concluded that the EEZ Act has a greater economic focus than that in the RMA and is fundamentally a "*resource and economic development statute*". Can this possibly be true? I certainly hope not. **Can we really put economic wellbeing alone above "*social, economic, and cultural wellbeing*"**?

4. Even from the economic stand point, there are strong arguments that the cumulative effects of continuing fossil fuel mining over coming decades far outweigh the benefits, as pointed out in major economic analyses by Lord Nicholas Stern[i], Ross Garnaut[ii] and many others. After all, it has been said that **the economy is a wholly-owned subsidiary of the environment**[iii] and that '*if you believe it's more important than the environment, try holding your breath while counting your money*'.

5. While talking about money, maybe we can move onto gambling. It seems fitting as we are meeting at a race course and the oil and gas industry has described exploration in the Taranaki Basin as a gamble[iv]. Did you know that the chance of winning a powerball is 1 in 38 million[v]? Yet 10 people won[vi] the powerball in 2014. You're probably wondering where I'm going.

6. DHI marine ecology reviewer on the STOS application Mr Jury[vii] noted that "*the likelihood of … a large uncontrolled discharge event occurring [referring to a well blowout] is estimated by the NZ Marine Oil*

Spill Risk Assessment (2010) as being approximately a 1 in 100 year event". STOS' economics witness Mr Colegrave, based on a Worley Parsons report, described an 8-12 week loss of well control as a 1-in-5000 year event (Colegrave Statement paragraph 105). Using these figures, STOS and EPA witnesses all conclude that the adverse effects of a large accidental hydrocarbon spill would be negligible to low because of the low probability of it happening. But remember the powerball winners and their 1 in 38 million chance of winning? You could be the winner tomorrow as long as you buy a ticket. In the same way, **for as long as we keep drilling, we risk having a well blowout with catastrophic effects every day**.

7. In 2012, the Department of Labour reminded the public that New Zealand is not immune from major petroleum accidents, "***In 1995 a blowout occurred at the McKee 13 well in Taranaki.*** *Gas, oil and drilling mud erupted around the base of the rig and spouted up to 30 meters into the air. There was a partial collapse of the surface area. It took some 35 hours to bring the blowout under control"* (Department of Labour, 2012[viii]). The Mangahewa Stream was contaminated for over 18 months[ix].

8. Most recently, **well integrity problems have occurred at Todd Energy's Mangahewa-C wellsite in Tikorangi where four of their eight wells were damaged,** two of which will be plugged and redrilled to different directions. Todd Energy explained[x], "*In late 2014 Todd had unexpected well activity at Mangahewa C site. This resulted in no production of gas. Attempted repair to the well in early 2015 was partially successful. Subsequently the well has returned to no production. As a result, we need to complete a more substantial repair. The repair requires plugging the bottom section of the well and re-drilling the bottom section using the Bentec rig. A second well at C site has a similar completion and this will be remediated at the same time to minimise future repairs and maintenance.*"

9. On Day 1 of the hearing, STOS' witness Mr. Hey reassured us that the Maui wells were designed and constructed "*to make sure that we have an integral structure which is going to support us for 20/30 years, as we've got wells today which are that age if not older*" (Day 1 Transcript p.121, lines 39-42). In other words, **these 20/30 year old wells at Maui have already passed their 'best by' date**. To me, it seems foolhardy to want to drill another 22 wells from these old wells, and induce production for the next 20-35 years.

10. As someone with a marine science background, I am deeply concerned at the **lack of science** and even basic information from STOS that are critical for a comprehensive impact assessment of the proposed extension of drilling, extraction and waste dumping for another 35 years. Some of the supplementary statements STOS' witnesses provided at the Hearing are conflicting and inconsistent, as pointed out by fellow submitter Ms Jean Kahui.

11. As has been stated numerous times during this Hearing, the EEZ Act s 61(1b) requires the EPA to base its decision on the "**best available information**" – information available without unreasonable cost, effort or time (s 61(5)). For a joint venture that has profited millions, if not billions of dollars, from New Zealand's non-renewable fossil fuel resources and operated at the Maui field for nearly four decades, is it unreasonable to expect that they should have the best available information to argue their case?

12. The fact is that back in 1988, nearly 30 years ago, Shell, BP and Todd Oil Services Ltd, as well as the government at the time, were told by New Zealand's independent Parliamentary Commissioner for the Environment, to **step up compliance and effects monitoring**. The Commissioner's oil and gas report[xi] last year, albeit focused largely on onshore operations, gave an equally grim picture on monitoring: "*… with New Zealand **clearly out of step with international 'best practice'**"*.

13. STOS want us to believe that the adverse effects of their operations on the environment have been negligible, minor or temporary and that they will remain that way despite another 35 years of drilling, extraction and waste dumping. But EPA's expert[xii] stated clearly that **the presence of the facilities has altered the benthic and pelagic community structure** in the adjacent area, the modified state is now "*the current state of the area*" and "*the communities that exist now are adapted to the presence of the Maui facilities.*" This brings me to the concept of 'shifting baseline'.

14. **A baseline is an important reference point** because a) it measures the health of ecosystems; b) it provides information against which to evaluate change; and c) it's how things used to be. If we know the baseline for a degraded ecosystem, we can work to restore it. **But if the baseline shifted before we really had a chance to chart it, then we can end up accepting a degraded state as normal, or even as an improvement**. The concept of **'shifting baseline'** has been widely recognised by ocean and fishery scientists[xiii].

15. **I want the Decision Making Committee to ask: *Where is the baseline*?** Shell, BP and Todd and the government have failed to collect the necessarily baseline data since 1988. We are now in 2015 and STOS still does not have adequate baseline data, albeit a shifted baseline from that in the 1970s and 80s. Is the Committee satisfied and accept that the inadequate information provided now is good enough as the new baseline for future monitoring of effects? **If you are not satisfied or you are not certain, then I sincerely urge that you make your decision based on caution and for the sake of protecting the environment, consistent with the EEZ Act s 61(2).**

16. This decision based on caution is crucial for the survival and recovery of the Critically Endangered Maui's dolphin, and no less for the Endangered Blue Whale known to forage in the South Taranaki Bight

and also considered to be present in the area on a regular basis. Credible science and government studies have confirmed that the Maui's dolphin is in imminent danger of extinction, that there are an estimated 55 individuals left in the world and the population is declining at nearly 3% a year. **With life on the line, every single individual counts, and every threat that may endanger that individual or its habitat counts, whether it's core or peripheral habitat**.

17. On day 2 of the Hearing, Ms McConnell emphasized that while there have been sightings of the dolphins out there, "*they are very, very few and far between so I strongly believe that the platforms represent the very periphery of the dolphins' habitat…"* (Transcript page 190, line 1-4). **But the reason that "*they are very, very few and far between*" is because there are so few of them left.** We have driven them close to extinction, by allowing more threats, from fishing to marine transport, pollution and mining, to proliferate. To use the infrequency of sightings of a critically endangered species to justify an exploitative activity is akin to celebrating the effect of global warming melting the Arctic, allowing drill ships to go further north to extract more fossil fuels – it's a perfect, **vicious cycle** that works in favour of the exploiter!

18. Surely, a responsible company or government would instead think, "*oh no, there are so few dolphins left that we hardly see them anymore, what caused that, let's do something to save them!*" Just two weeks ago, the Mexican Government[xiv] announced the extension of the protected area (to 13,000 km^2) for its Critically Endangered *vaquita* or Gulf of California porpoise (*Phocoena sinus*)[xv]. The newly expanded protected area, now spanning the porpoise's entire habitat and distribution range, is patrolled by the navy. As party to the Convention of Biological Diversity (CBD), Mexico has **international obligations** to protect and assist the recovery of threatened species, so has New Zealand. Yet much of Maui's dolphin's habitat is still open to gillnetting, trawling and increasingly mining, notably of oil and gas.

19. Again EPA expert's statement appears to understate the plight of the dolphin. It is clear in her statement (paragraph 209) that "*the Rio Declaration requires that States apply the **precautionary principle** and that a lack of scientific certainty should not be a reason for postponing measures to prevent environmental degradation*", and that EEZ Act s 61 and 59(2e) support this by requiring the DMC "*to take into account any uncertainty or inadequacy in the information available and favour caution and environmental protection*". It is clear from the DHI marine ecology review and various statements from STOS witnesses during the hearing that the best available information does not exist. **How can the EPA expert be so confident that "*any risk to the Maui's dolphin can be appropriately mitigated*"**? Remember we are not talking about any common dolphin here, we are talking about a Critically Endangered species on the brink of extinction. In my opinion, many of Ms Couzens' statements border on advocacy, and not for the environment, but for the applicant.

20. Speaking as an environmental advocate all my life, I see the Maui's dolphin as New Zealand's marine flagship species. If we allow fishing and mining interests to conduct business as usual, the fate of the dolphin will be '**death by a thousand cuts'**. It simply will not survive the impacts from a multitude of cumulative effects. Under the EEZ Act, the **EPA must take into account "*any cumulative effect that arises over time or in combination with other effects***" (EEZ Act s 6(1d) and 59(2a(i)). I sincerely ask the Committee to consider this seriously, to take caution and to assist New Zealand in honouring its international obligations.

21. As researcher for Climate Justice Taranaki (CJT), I have spoken at length about the rationale behind limiting the consent to five years while declining consent for well drilling, prohibiting fracking, requiring a detailed decommissioning plan, and laying down a series of stringent conditions. With my volunteer colleagues at CJT, we have done our best to trawl through the thousands of pages of documents tabled in relation to the application, and many more that we could find which demonstrate the value and vulnerability of the marine ecosystems and environment we have here, and the risks and problems of the proposed activities. We have read and re-read the EEZ Act, and parts of the Health, Safety in Employment (Petroleum Exploration and Extraction) Regulations, and the Marine Transport Act and Protection Rules, to try and make sense of the legal system and constraints that we are working under.

22. I have to say I am more disillusioned than ever, having read all these acts and regulations and engaged in the process. The law to me, now seems like a jumble of conflicting principles, largely a result of compromises between government and corporate power brokers, disguised in words chosen to pay lip service for ideals and values New Zealanders hold. The process is dominated by word-smithing, 'creative' interpretation and manipulation of powers. For community groups and individuals like us who dare to challenge the system and find the best outcome for the environment and humanity, **there is no level playing field**. In most cases, the end result is predetermined by the amount of resources the parties hold – to employ a lawyer, pay for witnesses and afford the time to go through the very time-consuming process.

23. Still, we make our commitments and sacrifices, in my case – days away from tending our food crops, evenings away from quality time with my family and countless late-night hours straining my eyes over the computer. Why? Because I feel compelled to stand up for our life-supporting planet, the ocean, the Maui's dolphin and other species that share our planet, so that there is a chance they will be here for my daughter and my dear friend Emily's baby, when they grow up. What we do and don't do now will affect them and all future generations of humanity.

24. As decision makers, you have the power to determine the fate of this application. I humbly ask you to consider the meanings and intentions behind all those words in the law, question the economic arguments tabled before you, and **seek a real economic analysis that internalises all environmental costs now and into the future, 35 years and beyond**. The current economic system based on growth and the rapid consumption of nature's finite resources cannot last. But there are endless alternatives to the status quo. We can grow food without urea made from natural gas. We can serve food without plastics made from methanol derived from natural gas. Visualise the kind of future that is possible – a world powered by responsible and truly sustainable energy systems, driven by communities sharing skills and resources, lowering consumption and fostering creativity, resourcefulness and resilience – and make it happen.

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[i] Stern, Nicholas, 2007. The Economics of Climate Change – The Stern Review. http://www.cambridge.org/us/academic/subjects/earth-and-environmental-science/climatology-and-climate-change/economics-climate-change-stern-review?format=PB

[ii] The Garnaut Review, 2011: Australia and the Global Response to Climate Change. http://www.garnautreview.org.au/

[iii] http://www.abc.net.au/environment/articles/2011/07/11/3266863.htm

[iv] http://www.radionz.co.nz/news/national/123164/oil-and-gas-exploration-permits-awarded

[v] http://www.stuff.co.nz/business/money/9621919/Crunching-the-numbers-on-Lotto-strategies

[vi] http://www.scoop.co.nz/stories/BU1411/S00806/are-you-new-zealands-next-powerball-winner.htm

[vii] DHI Marine Ecology Review April 2015, section 5.10.1

[viii] Department of Labour, 2012. Review of the Health and Safety in Employment (Petroleum Exploration and Exraction) Regulations 1999 – Discussion Paper. http://www.dol.govt.nz/consultation/petroleum-regulations/petroleum-regs-discussion.pdf

[ix] Desplaces, Jamie, 2012. Fracking. http://www.massivemagazine.org.nz/blog/566/fracking-the-deeper-you-dig-the-darker-it-gets/

[x] Todd Energy summary of community consultation forum on 14 April 2015.

[xi] Parliamentary Commissioner for the Environment, 2014. Drilling for oil and gas in New Zealand: Environmental oversight and regulation. http://www.pce.parliament.nz/publications/all-publications/drilling-for-oil-and-gas-in-new-zealand-environmental-oversight-and-regulation

[xii] EPA Expert Evaluation Report on STOS Maui marine consent application (paragraph 22)

[xiii] Shifting Baselines: Slow-Motion Disaster in the Sea. http://www.actionbioscience.org/environment/olson.html

[xiv] Mexico implements plan to save endangered vaquita porpoise, 17 April 2015. http://www.nzherald.co.nz/business/news/article.cfm?c_id=3&objectid=11434163

[xv] IUCN Cetacean Specialist Group, 2015. Vaquita. http://www.iucn-csg.org/index.php/vaquita/