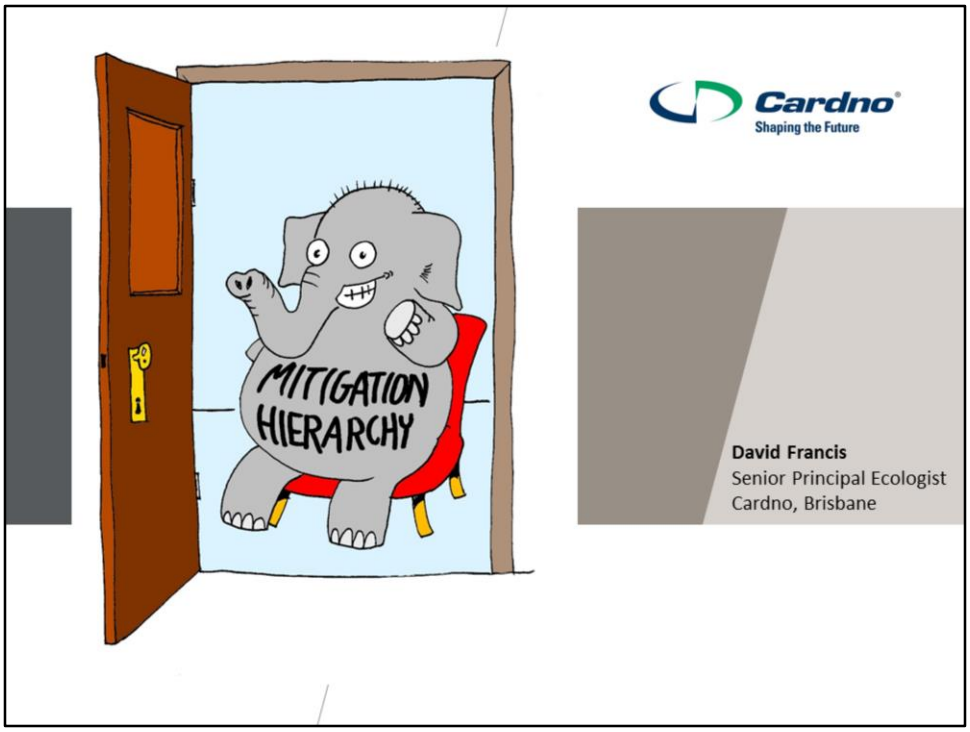
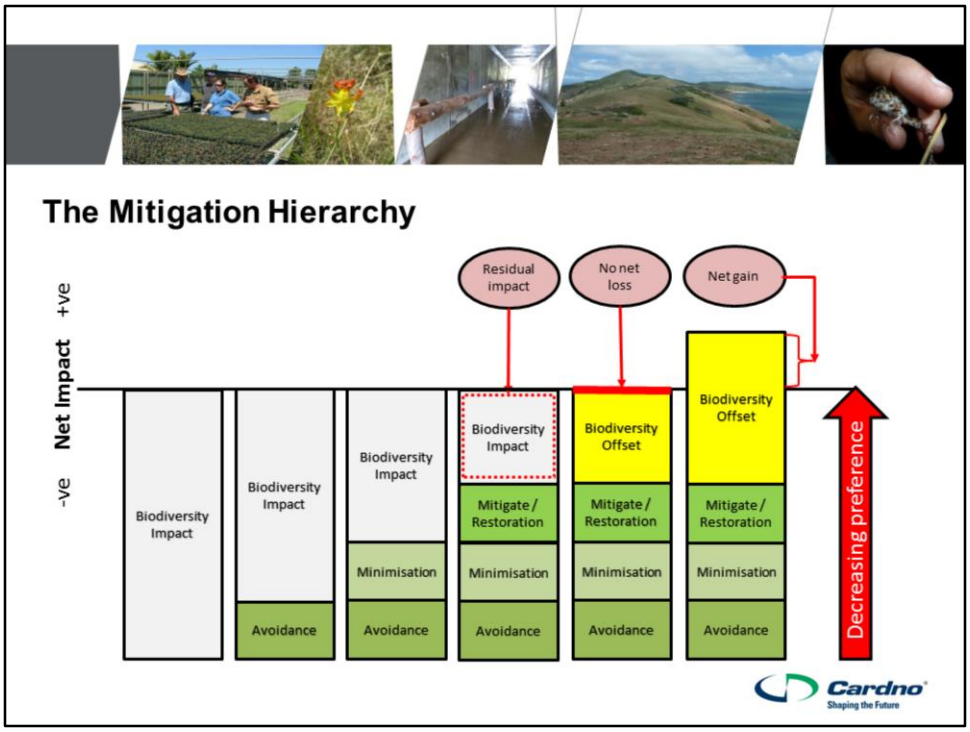
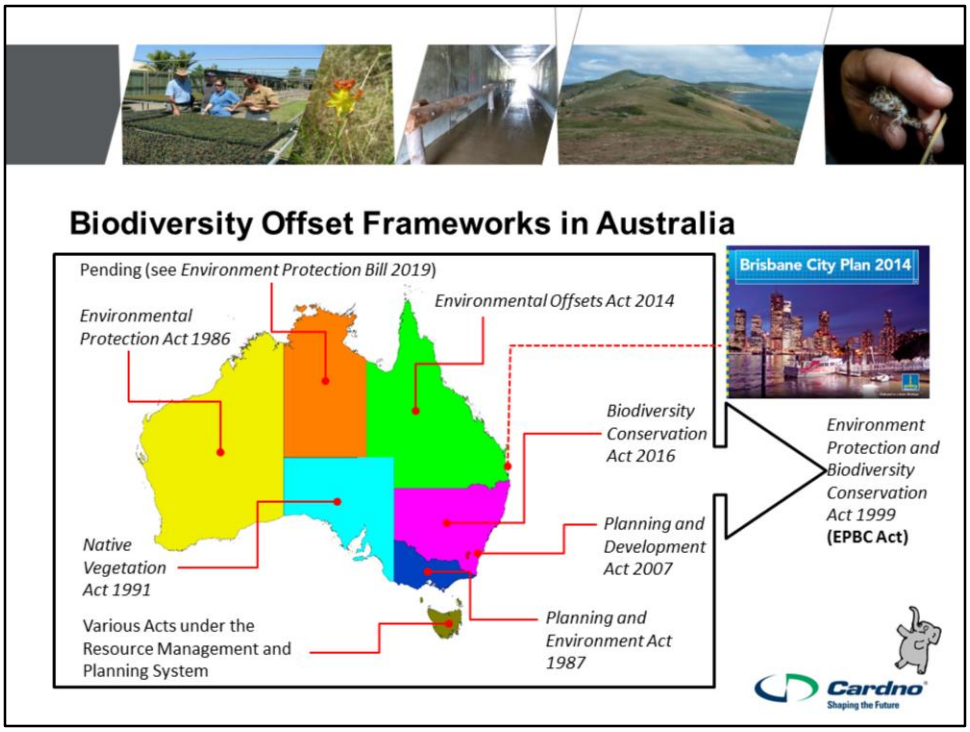


Before we move on with the rest of our exciting program there is something we need to briefly discuss….
The Mitigation hierarchy.



- I'm sure most of you are familiar with the hierarchy, but as a recap I will briefly go through how it works.
- The hierarchy is represented in many ways, often with different graphics and subtle differences in terminology. Frequently it is presented in the form of a graph.
- We start with an impact to a biodiversity value. The impact is negative and is therefore below the line.
- We can reduce the impact by avoiding the value (sometimes the impact can be entirely prevented through avoidance).
- We can continue to reduce the impact by way of minimization. For example, through limiting the length of the construction period to avoid the breeding season of a threatened species.
- Finally, mitigation and rehabilitation can be used to further reduce the impact.
- Once all of these steps have been executed the remaining impact is referred to as the residual impact.
- By offsetting this residual impact we end up in a situation where there is no net loss.
- However, the approach often is to aim for a biodiversity gain. Now we're in positive territory and it is a Net Gain.
- But of course as we move through the hierarchy we go through a series of less favorable approaches. So the ultimate preferred approach is to avoid the impact in the first instance.



Now in Australia there are biodiversity offset frameworks in place or under development in all States and Territories.

Sitting along side these is the Commonwealth Framework under the EPBC Act.

And now many local governments are adopting biodiversity offset frameworks – such as Brisbane City Council (indeed all of the south east Queensland local governments who join us here today have such frameworks).

Integral to each of these frameworks is the mitigation hierarchy.

- Delegates who registered earlier for this conference were given the opportunity to provide questions for our panel which is in following the following session.
- Two of these questions were about the mitigation hierarchy and how jurisdictions apply it effectively.
- The first considers how the hierarchy is followed after approval.
- The second asks how it is applied without political interference.
- I can't answer these directly, but I will explore examples that touch on some of the issues raised in the questions.
- Let's consider how the hierarchy is intended to be applied in our current frameworks.

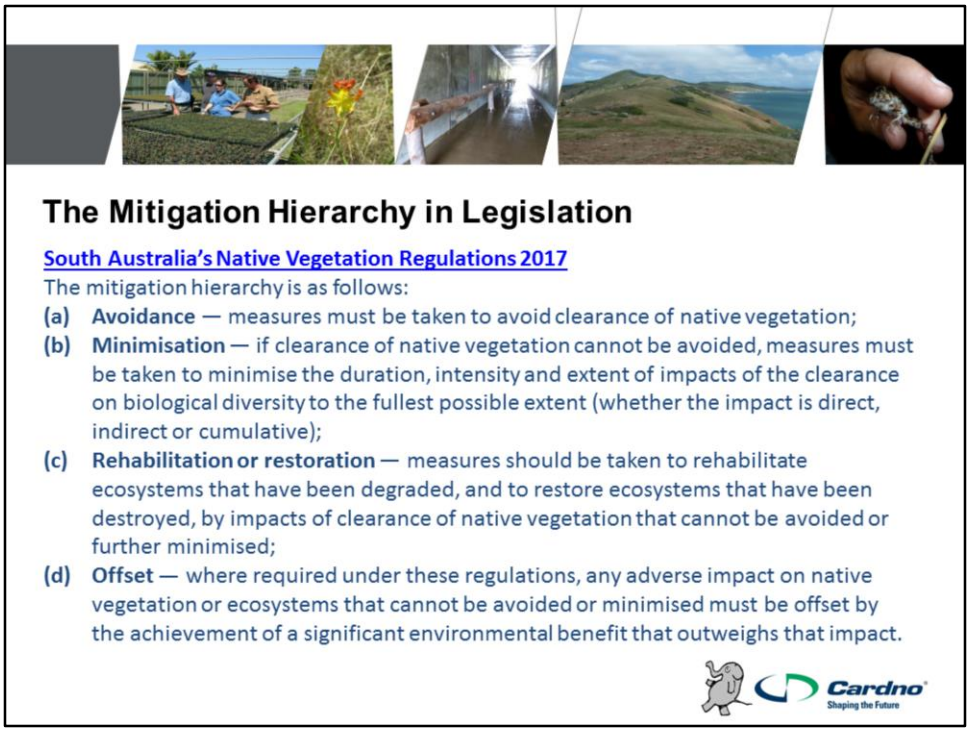
The Mitigation Hierarchy in Policy

Policy	Application of mitigation hierarchy
Environment Protection and Biodiversity Conservation Act 1999 Environmental Offsets Policy	*Offsets will not be considered until all reasonable avoidance and mitigation measures are considered, or acceptable reasons are provided as to why avoidance or mitigation of impacts is not reasonably achievable*
Queensland Environmental Offsets Policy	*Environmental impacts must first be avoided, then minimised, before considering the use of offsets for any remaining impact*
Brisbane City Plan 2014 Offsets Planning Scheme Policy	*The Council's environmental offset requirements are underpinned by the premise that impacts are avoided, then minimised, before considering the use of offsets for any remaining impacts*

Cardno Shaping the Future

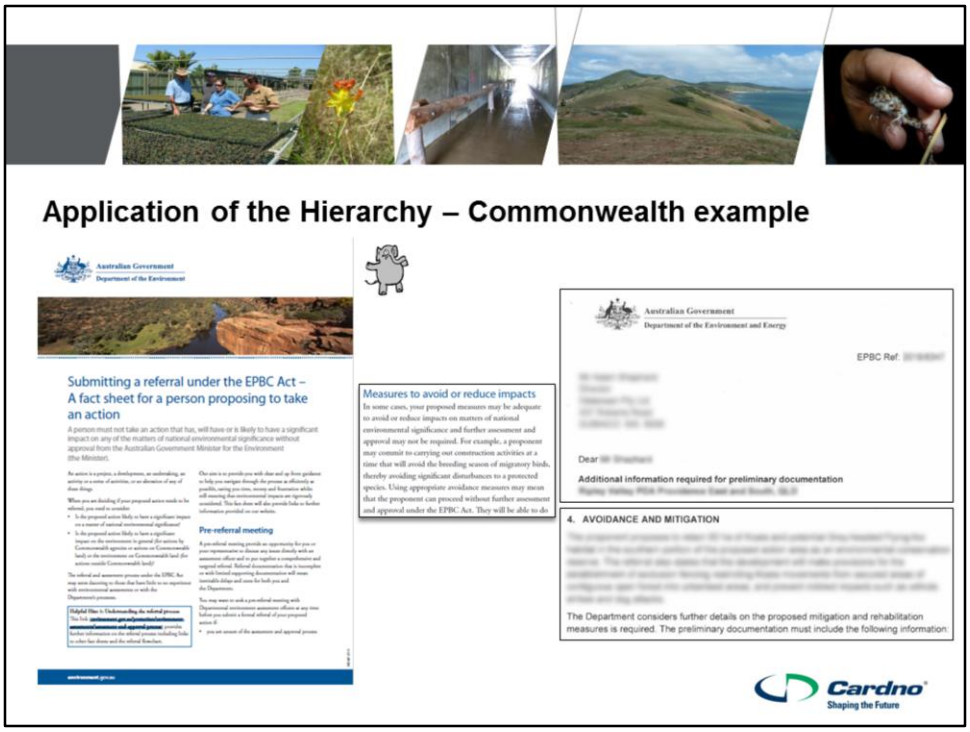
Let's consider a few example policies at the Commonwealth, State and Local government levels, being the EPBC Act Offsets Policy, the Queensland Environmental Offsets policy and the Brisbane City Planning Scheme.

Each require that the mitigation hierarchy must be considered before we even get to the point of considering offsets.



While policies are good, embodying the requirement to address the mitigation hierarchy in legislation is better. South Australia's Native Vegetation Regulation is an example of how this is achieved.

Lets look now at the mechanics of applying the hierarchy – I'll consider 3 approaches associated with 3 frameworks.

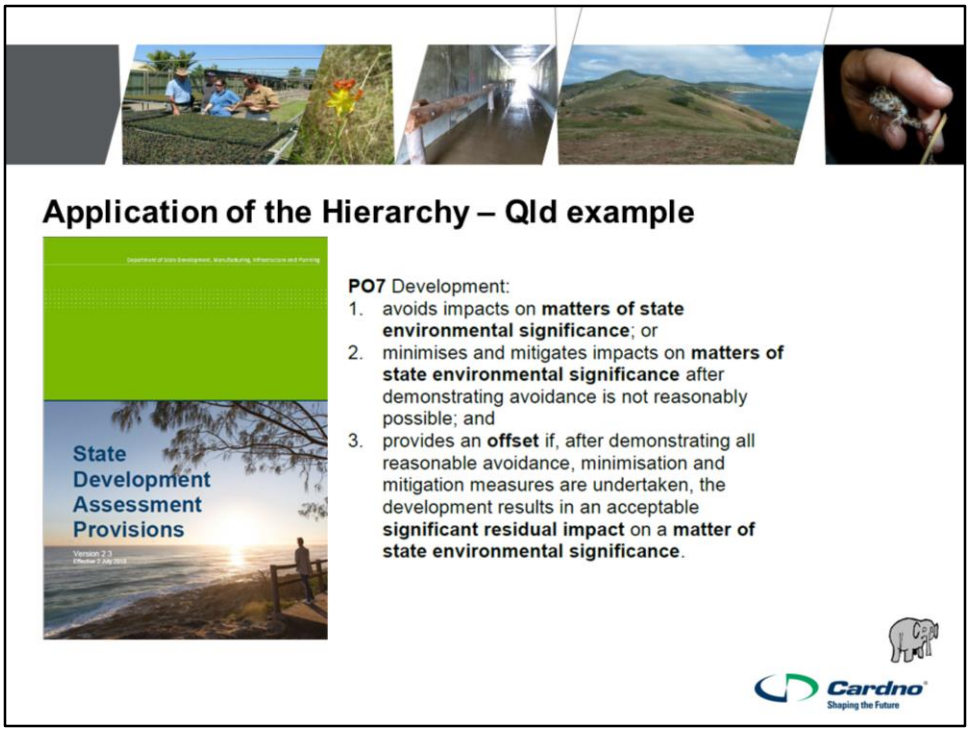


Firstly the EPBC Act.

The hierarchy needs to be considered throughout the assessment process.

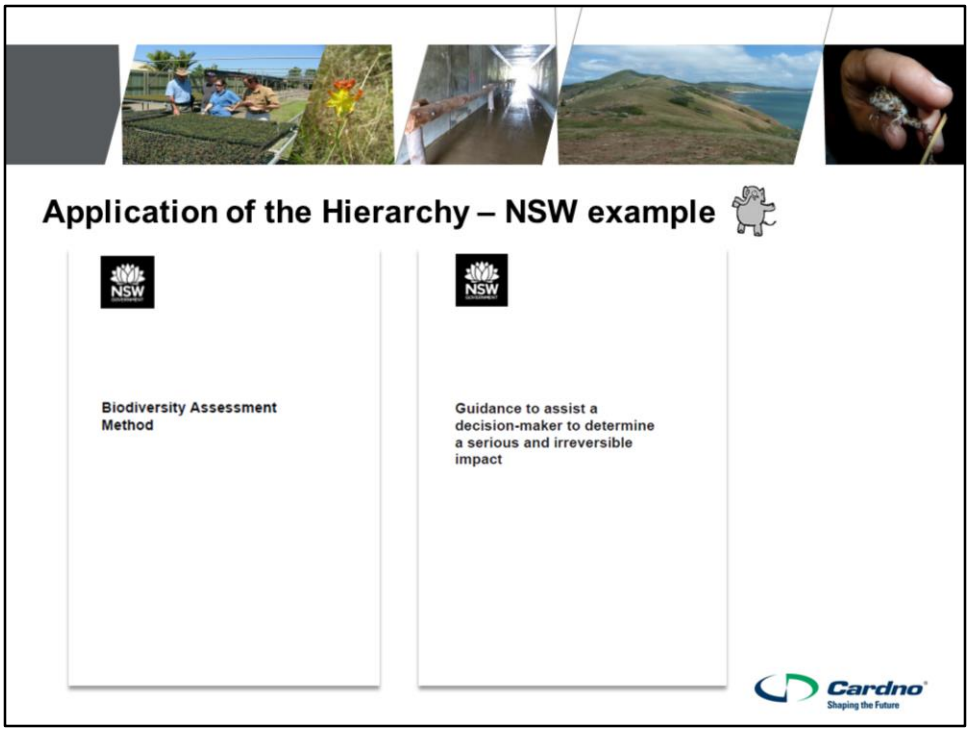
Initially when a referral is lodged a proponent is required to demonstrate how the hierarchy has been considered.

If a decision is made that the project is a controlled action then there is a need to explore the hierarchy further. In this example where a project is assessed through preliminary documentation there was a need to further demonstrate Avoidance and Mitigation.



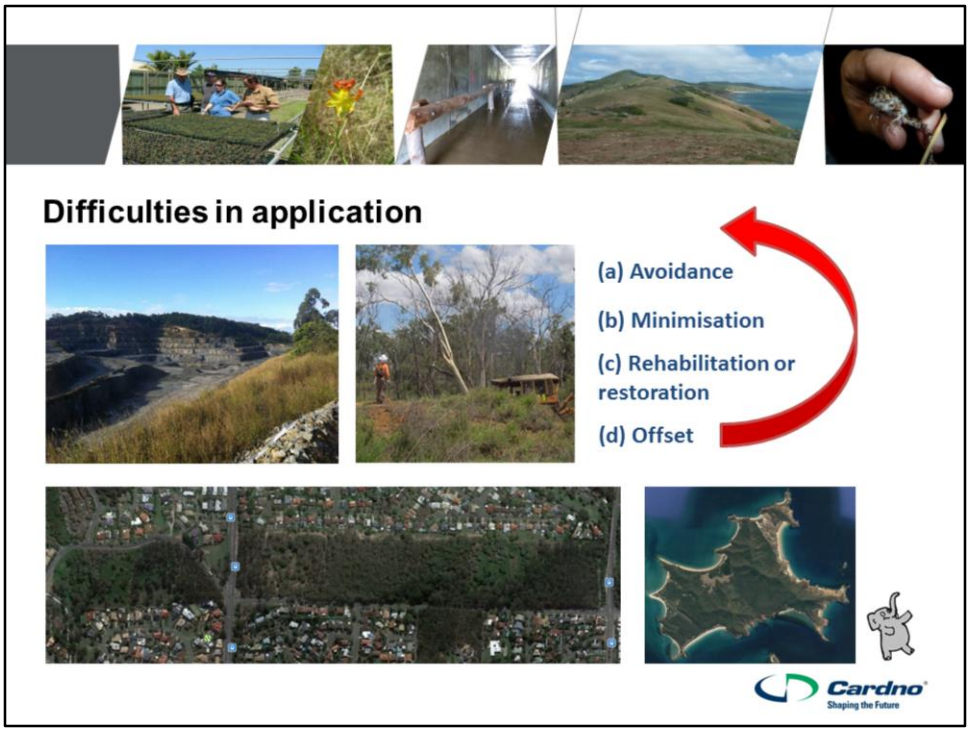
The Queensland State Development Assessment Provisions provide assessment benchmarks for applications affecting matters of interest to the State including matters of state environmental significance. The provisions include performance outcomes that must be met in order to achieve compliance.

This performance outcome requires applicants to demonstrate they have applied the mitigation hierarchy.



The NSW Biodiversity Assessment method incorporates the mitigation hierarchy.

One interesting addition to the method though is consideration of “serious and irreversible impact”. Effectively this process identifies that there are some values for which avoidance is the only acceptable outcome.



- But when we get to the point of actually applying the hierarchy there are of course often difficulties.
- Sometimes it is impossible to avoid the impact. Take for example an extractive resource such as a hard rock quarry. The quarry must be located where the resource occurs and often it is necessary to utilize resources proximate to where it is needed – the roads, buildings and other infrastructure we use daily.
- Or take this hypothetical example – a road reserve in Brisbane. This isolated patch in the suburbs is likely to support multiple biodiversity values. As the population increases it is likely that the road will need to be realized. Now it may be possible to avoid the impact by way of tunneling under the biodiversity values, but this will be incredibly expensive, perhaps to the point where it is cost prohibitive. In this instance should community's need for this infrastructure override the need to avoid the biodiversity values.
- Generally, minimization of impacts is readily addressed. However, returning to one of the delegate questions, ensuring promised minimization approaches can be hard to adhere to due to unforeseen issues.
- An example of where mitigation can be difficult is where the subtle differences between rehabilitation and offset delivery is confused. Quite a bit of debate on this subject ensued in relation to a project I was involved with a few years back.
- And then we get to offsetting. Sometimes, I have to concede, we seem to arrive at an offsetting outcome without adequately considering the hierarchy.

- Now, despite the mitigation hierarchy being fundamental to biodiversity offsets, they are often inadequately considered for a range of reasons. These reasons, and discussion regarding potential solutions, could form the basis of a standalone conference.
- The presentations over the next two days focus on the delivery of biodiversity offsets.
- So, while we might occasionally touch on the hierarchy over the next two days, I will quietly close the door on the issue and give the floor to the next speaker of this session.