One of the key demands is for their companies to withdraw from organisations that are not pulling their weight.

"Investors expect companies to ensure that they are aligned with the Paris Agreement and that company resources are not used to support trade associations that act for short-term gain, undermining Paris Agreement objectives," the IGCC letter said.

Front and centre is the coal lobby; groups like the Minerals Council of Australia, Coal 21 and the New South Wales Minerals Council, which the big institutions say, "continue to undermine effective climate policy".

"I think there’s a lot of scope for Australia’s industry associations to be working better with their members, in terms of managing for what we know will be very real financial implications arising from climate change," Ms Herd said.

Vested interests

The Business Council is under fire for supporting Kyoto carry-over credits to meet Australia’s emissions reduction target for the more recent Paris Agreement.

That's despite the BCA saying it supports Paris.

"In carbon accounting terms, that means that these organisations, and now the Federal Government, are planning for Australia to emit an additional 370 million tonnes of carbon, or CO2 equivalent, by 2030," Brynn O'Brien, head of shareholder activist group The Australasian Centre for Corporate Responsibility (ACCR), said.

According to the BCA’s website, its policy on climate change comes from its Energy and Climate Change Committee.

A committee where the majority of member companies are heavy emitters of carbon.

It includes big names like Origin Energy, Orica, Santos, BP, Ausgrid, Chevron, BHP, Caltex, Shell and ExxonMobil.

"When you do have that key policy committee dominated by some of the companies that stand to benefit from delay to our de-carbonisation and our transition in Australia, that's how you end up with policy that is not representative of the broader membership," Ms O'Brien said.

Under pressure from shareholders, Westpac, Telstra and BHP are among those reviewing their memberships of the Business Council.

BHP is also reviewing its membership of the Minerals Council, having already quit the world Coal Association.

"Many coal producers I think are quite realistic about the outlook for their commodity, they know that's it's going to decline," Mr Johnson said.

"But they've got positions to preserve at the moment so they will work quite vociferously to preserve those positions."

Other lobby groups are also in the firing line.

London-based shareholder activist group Influence Map has rated the world’s worst on climate change.

Four Australian organisations make the top 30, with the Minerals Council at number eight.