

*Environmental Impact Assessments around the world do not meet scientific standards*

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Governments around the world rely on Environmental Impact Assessment (EIA) to provide an evidentiary evaluation of potential environmental impacts from development when deciding whether major projects – like mines, oil and gas extraction and refining, and major infrastructure – should be granted and how they should be designed. We reviewed reports from EIAs around the world and found that they are generally unreliable in analyzing environmental impacts from projects. Surprisingly, we document that EIA reports from Canada, USA, Mexico, Brazil, England and Wales, Australia and New Zealand consistently determined that few to no significant environmental impacts were expected from development projects, despite the fact that the number, kind and scale of impacts vary considerably between these different countries. To explain this finding, we review the steps taken within EIA to come to conclusions on the significance of environmental impact. We find that, regardless of country, EIA reports often did not consider a broad enough range of impacts and treated actions meant to reduce the severity of impacts as effective without evidence. Sometimes, these actions to reduce impact severity were treated as effective even when the description for these actions were ambiguous, and in certain cases it was not clear whether an action would even be carried out. Finally, we found that EIAs rarely consider the opinions of people affected by developments; that is, those opinions were not reflected in decisions on the projects. Instead, decisions on impact importance were overwhelmingly made by consultants writing the report, and the justification behind these decisions was not clearly described. The scientific shortcomings we reveal in EIA reports from around the world are concerning because they can lead to poor assessments of environmental impact from

projects instead of providing a rigorous justification for decisions. We think EIAs have potential to provide scientific support for decisions on projects, but EIA reports need to reflect scientific standards of evidence.



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