Typologies of expected and idealised futures of environmental impact assessment (EIA) practice



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The Future of EIA Practice

the 20th century's most successful environmental policy instrument – will it hold prominence in the coming decades of rapid change and global megatrends?



* Indispensable to the 1960s



"Forward-looking": the future of EIA practice

Knowledge gap: what do we understand about the future of EIA practice?

EIA Context

Global megatrends A fast-changing world Novel obligations for development Persistent challenges



EIA Research Focus [general]

"Looking back" Progress reviews Evaluation of effectiveness Methods and processes Challenges for practice Auditing & conduct, etc.

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Why is this useful?

Identifying risks & future-proofing a critical step towards identifying risks for EIA practice, and opportunities for future-proofing.

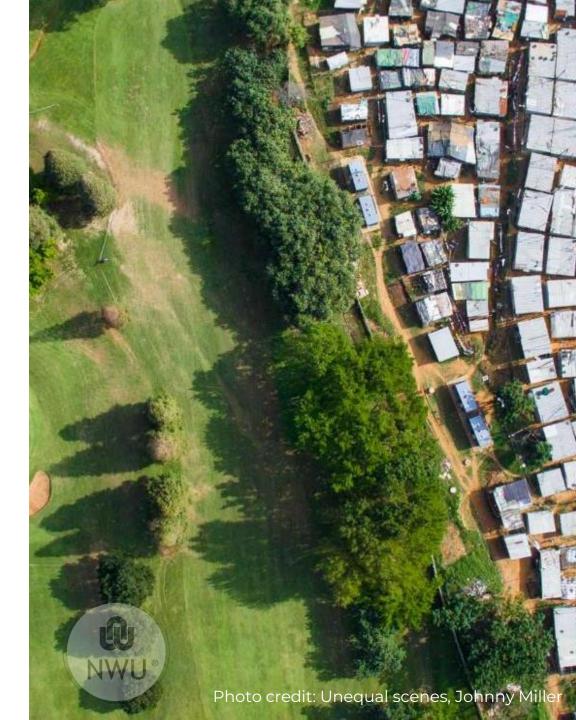
Problem Statement

A world that is developing with equal consideration for prosperity, human wellbeing and environmental factors remains elusive; hence the intended outcomes of EIA are not manifesting.

EIA objectives are not isolated from global megatrends and novel obligations –

environmental and climate change societal transformation functioning of economies green recovery sustainable investment taxonomies of investment

Can the EIA practice's past performance in a static context, imply future influence in a fast-changing context?



Expected vs. ideal futures

expected adjective 1. <u>regarded as likely</u>; anticipated *"write down your expected monthly income"*

idealised

adjective

1. satisfying one's <u>conception</u> of what is most suitable *"in the ideal world, we might have made a different decision"*

2. existing only in the imagination; <u>desirable or perfect</u> <u>but not likely to become a reality</u>

Definitions from Oxford Languages (2023)

Methodology

— The "Q-method" was applied to generate typologies of EIA perspectives



What will the future world look like?



What are the expected and idealised future of EIA practice?

Typologies of the future EIA

across emerging and developed economies



Developed Economies

Australia, New Zealand, Canada, United Kingdom, Netherlands, Europe, Scandinavia, Israel, Portugal

Emerging Economies South Africa, Namibia, Kenya, Brazil

Respondent	Developed Economies	Emerging Economies	Total no. of respondents
EIA practice	10	10	20
ESG + EIA practice	3	3	6
EIA Authorities	2	2	4
EIA Academia	5	5	10
Total			40

		-4	2	0	4	1	Environmental regulation will drastically change to keep up with high environmental impacts.
		-3	1	-3	4	2	EIA decisions will be guided by new progress indicators, shifting away from GDP growth as main socio-economic indicator.
1.3		2	4	-1	3	3	EIA will serve a role of aligning financial investments with climate and other sustainability goals.
		0	4	-3	0	4	Sustainable development will be determined by green and sustainable finance taxonomies, including climate risk financial disclosures in EIA.
_	「	0		-4	0	· ·	Green and sustainable finance taxonomies will advance the EIA system for better environmental protection.
0		2	-2	-4 -3	-4	4	EIA will have limited ability to prevent environmental degradation outside of protected areas.
		2	-3	-1	-4	3	EIA role and function will reduce as the economic outlook worsens.
S I	114		-2	,	-3	2	EIA will still represent development that erodes natural resources as acceptable.
> v		-2	-4	0	-3	-2	Green and sustainable finance will weaken environmental outcomes of EIA.
ot individual views stical impressions	니고	-2	-4	-2	-3	-1	 EIA will become redundant to boost economic activity.
	[lr	0	-3	-2	-3	0	 How authorities evaluate development projects for environmental authorization will remain unchanged.
\sim O		-3	-3	-2	-3	0	 EIA will advance sharing economies as opposed to limited ownership.
> .2	게	-4	-2	-2	0	1	
		-2	-1	-4	-2	0	Automated EIA decision-making will improve the handling of environmental complexities.
							EIA will consider GDP growth as priority factor for achieving green growth.
$\mathbf{\underline{\mathbf{U}}}$ $\mathbf{\mathbf{U}}$	Մ	-3	-2	-3	-1	-1	Mandating new technologies through EIA will make development economically unfeasible.
		-2	-3	-2	-1 -2	-2 -1	How alternatives are assessed in EIA will remain unchanged by the rise of green and sustainable finance taxonomies.
prd	시	· · ·					EIA will face environment-economy conflict against substantial political pressure.
		4	1	2	-1	1	Shifting from an economic to an ecological framing of sustainable development will remain a challenge.
	니니고	2	3	1	1	-3	EIA will be streamlined to deal with emergency and disaster events.
		2	2	1	-1	-4	De-regulation of environmental protection will affect EIA.
		3	0	2	0	-4	EIA procedures and decision-making will still be value-laden and influenced by subjectivities.
	11 1-	1	0	2	-2	-3	• EIA policies will lag behind in guiding EIA towards other economic objectives (i.e. well-being, equity, safe environmental space).
c n	L	3	1	1	-2	-2	EIA will be challenged by beliefs about the need for economic growth.
	ار	1	2	-1	1	1	EIA will rely on greater implementation of economic instruments to guide sustainable development.
	ЦЦ	1	2	0	2	0	The role of EIA will be expanded to include sustainability assurance.
	│∏┌│	0	1	о	1	3	EIA will give effect to green economic development.
		0	2	0	2	1	The mitigation hierarchy of impact assessments will shift focus to positive contributions of development.
_ ب	니니니	0	1	1	2	1	EIA will include an accounting indicator to account for environmental loss or gains.
ס ני		0	-1	-1	-1	-1	Lengthy and complex EIA regulatory processes will remain a key barrier to green economic investments.
ت ب	게	1	0	0	0	0	EIA will be improved by automated assessments and automated datasets.
i		-1	0	-2	0	2	EIA will standardise financial innovation - i.e. payments for nature-based solutions, climate finance, etc.
\circ	ነጊ	1	-1	-1	-1	2	Environmental liability insurance will remain outside the scope of EIA procedures and decision-making.
tput st		-1	3	4	2	2	EIA procedural changes will affect how development projects are designed, appraised and selected.
	Г	-1	-1	0	0	-2	EIA will be complicated by new modelling tools (i.e. Systems Methodology, System Dynamics).
	I L	-2	0	1	0	-2	EIA will shift in norms from efficiency to sufficiency.
\bigcirc	[[-	-1	-1	0	1	0	• EIA will include mandatory "environmental protection deposits" - to cover future environmental damages caused by development.
\mathbf{U}	ЦЧ	-1	0	2	1	0	EIA will prioritise alternative development models – i.e. socio-technical innovation.
		-1	-1	2	3	-3	EIA will become a collaborative space for alternative futures.
	L_	1	0	3	1	-1	• The range of EIA regulating activities will expand – such as assessing the impacts of crypto mining and its impacts on climate goals.
	Ч	0	0	3	3	-1	 EIA will apply new dynamic EIA tools to engage with exponential change.
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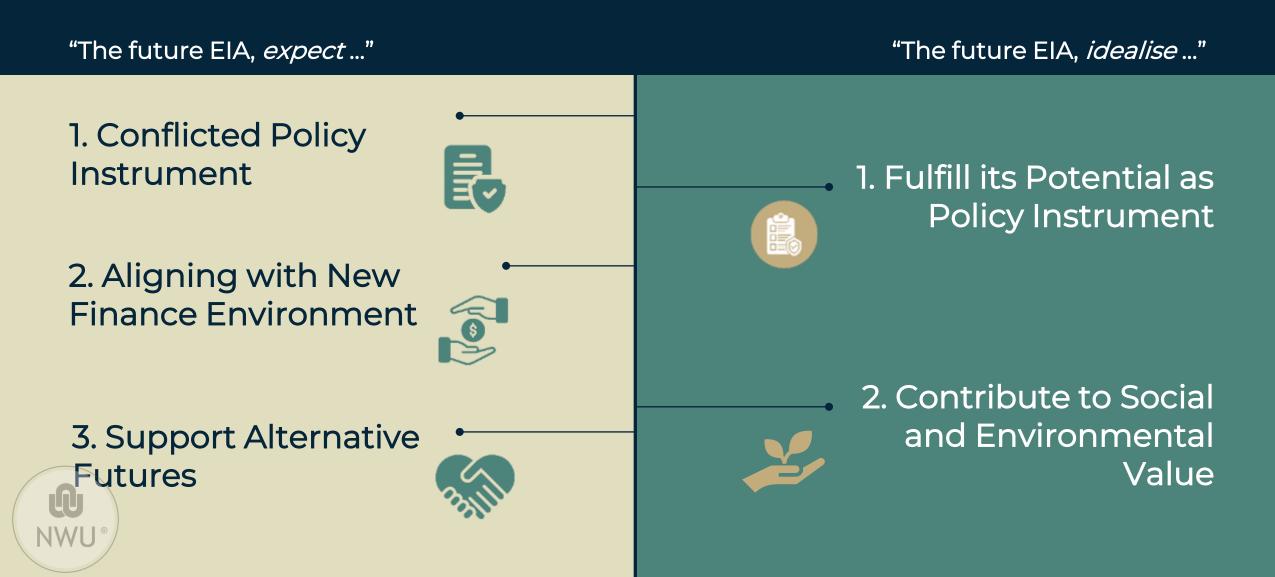
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EIA practice perceives the 'Future Of EIA' according to three expected typologies, and two ideal typologies:



Findings: Typologies on the <u>expected</u> future EIA



- Substantial political pressure
- EIA remaining prominent but with a loss of influence, particularly against its initial role and function

Functioning in a New Financial Environment

Conflicted

Instrument

Policy

 $\overline{\mathbf{\cdot \cdot \cdot}}$

Supporting Alternative Futures

- EIA aligning investment with climate & sustainability objectives
- EIA alignment with green/sustainable finance taxonomies
- EIA making provision for sustainability assurance
- Integration: environmental outcomes & financial investment
- Cohort of change & collaborative space
- New EIA procedures changing how development is designed & appraised
- Novel environmental impacts impact of blockchain technology

Findings: Typologies on the *idealised* future EIA



- Inherent potential to advance environmental protection and equitable distribution of benefits, impacts and risks
- Drastic change in environmental regulation
- EIA capability to increase its role in environmental impact prevention outside of protected areas
- Shift in focus: from mitigation hierarchy to focus on **positive** contributions of development

Future EIA for Social & Environmental Value

- New generation EIA guided by multiple novel tools, instruments and approaches developed to give effect to sustainability, human well-being and nature-based solutions
- New progress indicators guiding EIA decisions
- EIA policies will guide **alternative economic objectives**: wellbeing, equity, environmental boundaries

Consensus

A shared vision for a desirable future may be the most critical task facing humanity ~ Robert Costanza



"Visions of alternative (unpredictable) futures and their use in policy analysis." Conservation ecology 4.1 (2000).

Consensus: Expected Future EIA

"EIAs will not become redundant, but the way we do EIAs will change.....

on its current trajectory, it will likely lose influence, if not engaging with the alternatives of taking up a more pragmatic role, away from end-of decision-making instrument to integrate more meaningfully with investment and sustainability objectives in a new financial environment..." Green and sustainable finance taxonomies will change how alternatives are assessed in EIA

EIA will be challenged by the need to shift from economic to ecological sustainable development

EIA will not become redundant to boost economic activity

De-regulation of environmental protection will affect EIA

EIA will be streamlined to deal with emergency and disaster events

EIA will face environment-economy conflict against political pressures

Consensus: Idealised Future EIA

"The ideal is to advance EIA practice, to gain influence...

The ideal future EIA gains *influence by expanding its* capability. It responds to a new financial environment. It responds to the future shift in what developers/investors consider 'value' - from economic to social and environmental value... it is a critical future tool for environmental outcomes..."

Green and sustainable finance taxonomies: changing how alternatives are assessed in EIA

> Green and sustainable finance: strengthening environmental outcomes of EIA

EIA giving effect to green economic, development

EIA decisions will be guided by new progress indicators, shifting away from GDP as main socio-economic indicator

> EIA serving a role of aligning financial investments with climate and other • sustainability goals

Green and sustainable finance taxonomies advancing the EIA System for better environmental •--protection

Key take-away

EIA practice needs 'future-proofing' to avoid a loss of influence.



'Ideal future': plausible and practical focus areas for EIA future-proofing.



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Let's continue the conversation!

Post questions and comments in the IAIA24 app.

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