Catalyst: Strategic Performance Areas and Sample Key Performance Indicators

The purpose of this document is to guide the development of Key Performance Indicators for research projects/programmes funded through the Catalyst Fund – Strategic.

While not exhaustive, the examples provide an indication of outcomes sought from Catalyst Strategic investments. Contract holders can develop their own performance measures they feel best demonstrate the value and impact of their research. KPIs should be outcome-oriented and align with the specific objectives and goals of the investment and should be clearly defined, measurable, and specific, allowing for objective tracking of progress across the term of the contract.

Performance Area	Definition / Use	Example KPI title	Example target and recurrence	When to use this type of KPI?
Impact *International collaborations are positively transforming New Zealand's economy, environment, and society*	• Catalyst is delivering benefit to New Zealand • Catalyst is developing new knowledge and opportunities • Catalyst is delivering economic growth • Impact is not paper publications with novel results. Rather, impact is how novel results will affect long-term societal, economic, or environmental change.	Impact case studies	▪ X case studies published to demonstrate contribution of Catalyst funding to national (economic, social, environmental or health) benefit (measured annually) ***Note that at least 1 case study at the end of the contract is mandatory***	• All Catalyst: Strategic contracts must have at least one Impact KPI that is measured annually • Catalyst investment plan and assessment criteria always include impact
		Development of new IP	▪ Patents, trademarks and licenses/PVRs, NDAs as appropriate produced as a result of funded research (measured annually)	
		Uptake of products, processes, tools etc by end-users	▪ X research outputs (products, data, tools etc) are being used by Y end-users for <purpose> (measured annually)	
		Engagement with potential end-users	▪ At least x engagement activities (meetings, workshops, hui, etc) (measured annually) *Should tie into an outcome KPI, eg. end-user $X co-funding*	
		Delivery of a quantifiable economic, environmental, or societal impact	▪ Metrics demonstrating a trend (eg, increase, maintenance and/or reduction in decline) towards a target (or targets) within a timeframe (eg, X% annually; or Y% by 2025 and Z% by 2050)	
Excellence *New Zealand researchers are contributing to global science challenges*	• Excellence refers to the scientific novelty, robustness, and other factors representing the value of the research undertaken. • External (national or international) recognition of science excellence	Peer reviewed, joint publications with international collaborators	▪ X number of joint publications accepted in top journals worldwide per year (measured annually),	• All Catalyst: Strategic contracts must have at least one Excellence KPI that is measured annually • Catalyst investment plan and assessment criteria always include excellence
		External recognition	▪ Project-specific recognition, i.e. invited technical contributions (keynote addresses, advisory group appointments) or prestigious awards (one-off)	
		Citations of joint publications	▪ Citation score of X of joint publications, normalised by field, publication type, and publication year (measured annually)	
Collaboration and partnerships *International research and infrastructure is leveraged for New Zealand's benefit*	• Leveraging international connections to support New Zealand project and investment aims • Measures support to/from and partnership with the international	Knowledge exchanges with international partners	▪ X number of international knowledges exchanges (specify, e.g. hosting of researchers, joint meetings or workshops) per year (measured annually)	• All Catalyst: Strategic contracts must have at least one Collaboration & partnership KPI measured annually
		Accessing international research infrastructure	▪ X number of New Zealand researchers visiting overseas labs or facilities per year (measured annually) - or -	

	partner, specified in the investment, and in the project description.		▪ X New Zealand researchers access to Y datasets or data from international sources that would not otherwise be available (measured annually)	• Catalyst investment plan and assessment criteria always include collaborations
		Co-development of outputs	▪ X number of technical products or processes developed with international partners	
Capability development *Opportunities for emerging researchers and leaders to benefit from global research and innovation connections are created*	• Capability-building initiatives e.g., support of students, early-career researchers, post-docs or provision of mentorship, training, or specific opportunities.	Capability-building initiatives e.g., support of students, early-career researchers, post-docs or provision of mentorship, training, or specific opportunities.	▪ Number of capability-building initiatives (nature determined by investment) meets or exceeds X per year - or- ▪ Annual numbers indicate progress to X over term of investment	• The Catalyst Investment Plan includes: Create opportunities for emerging researchers and leaders to build and benefit from global research and innovation industry connections • All Catalyst: Strategic contracts should have at least one Capability development KPI that is measured annually
Financial sustainability/independence *Enduring, productive partnerships are established which are capable of attracting funding from other sources*	• Refers to the ongoing partnership developed through the project, enduring in some form beyond the current investment • Is most ideally achieved by securing independent external and unique funding which demonstrates the utility of the project and collaboration – such as through industry investment in the resulting technology.	Funding (direct or in-kind) leveraged from sources external from the Catalyst Fund (needs to be unique, i.e. not existing at start of project).	▪ $X of unique, leveraged funding per year - or- ▪ Annual numbers indicate progress to $X over term of investment	• Catalyst seeks to build robust and sustainable research ecosystems, enduring beyond the initial investment of Catalyst funding • All Catalyst: Strategic contracts should have at least one Financial Sustainability KPI that is measured annually
		Committing to future collaborative research with international partners	▪ Number of new agreement(s) signed with international partners committing to future collaborative research in [insert topic] - or - ▪ Spin-off or licensing agreements to manage intellectual property resulting from the project are formed between the project partners (one-off)	
		Continuing funding with international partners has been sought	▪ X number of joint funding applications have been submitted over term of investment	
Vision Mātauranga *Māori people, knowledge, and resources are enabled through genuine, fit-for-purpose approaches*	• Partnerships with Māori are built and maintained to effectively engage Māori in research. • To recognise and utilise the contribution of Māori knowledge and resources. • To help achieve the aims of the Vision Mātauranga Policy.	Growth in Māori research capability	▪ Proportion of Māori receiving investment funding equals or exceeds $X annually	• Alignment with the Vision Mātauranga policy, on a case-by-case basis should be considered • To be used where the project has relevance to Māori or a component involves mātauranga.
		$ invested in Māori–led or research co-designed with Māori	▪ At least $X of investment each year allocated to Māori-led or research co-designed with Māori	