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Operationalizing Sustainability Principles in the Engineering Profession

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ABSTRACT

The engineering profession has responded to the issue of sustainable development in two main ways. It has responded through public policy statements that acknowledge the magnitude of the problem in addition to pledging to steer engineering towards a more sustainable future, and it has also responded more directly through technological innovation. In this paper, these two responses will be explored with respect to the debate on how to operationalize sustainability principles in practical terms. This paper also attempts to provide the rationale for a philosophy of engineering ethics grounded in the notion of sustainable development. It is hoped that this would lead to a revised "social contract" that would enable engineers to engage more actively in political, technical, economic and social discussions and processes.

KEYWORDS

Engineering Sustainability; Technological Innovation; Public Policy; Sustainable Development

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