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# Old wine in new bottles: a critical exploration of the UN's conceptions and mechanisms for the transfer of environmentally sound technologies to industry

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## Abstract

Environmentally sound technologies (ESTs) have been recommended for uptake into production mainly from discussions within the United Nations, professional “green” organisations, and industry. The UN has taken the lead both in conceptualising these technologies and organising institutional mechanisms for their transfer. This article engages critically the UN’s conception of ESTs and the mechanisms for diffusing them into national industries. A closer look of UNEP/UNIDO’s mechanisms for diffusing cleaner production practices and transfers into national industries has also been made to see if new avenues have been opened to connect environment with development at the industrial level. It appears that the so-called “cleaner” technology risks being no more than an old wine in new bottles. © 2000 Published by Elsevier Science Ltd. All rights reserved.

*Keywords:* UN; ESTs; Institutional mechanism; Environment; Development; Industry

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## 1. Background: the Earth Summit, Agenda 21, and the problems of EST transfer

The United Nations Earth Summit, held in Rio de Janeiro in 1992, produced an action document called Agenda 21. The purpose of Agenda 21 was the unenviable task of translating into an action document the United Nations Commission on the Environment and Development (UNCED) Report on Sustainable Development. Underpinning Agenda 21 is the explicitly stated claim that gains for environmental

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security can be purchased even while embarking on economic development. Its ruling assumption is that there is no zero-sum game between environment and development; that a positive-sum game between them is both desirable and possible.

While politically such a rhetorical discourse may be necessary and perhaps even effective in balancing conflicting interests and bringing along many to support environmentally friendly measures, in reality economic development (as it has been practised) entails and generates an unacceptable threshold or level of waste and polluting emissions. Analytically, the claim that environment and development can be paired has to be tempered with the skepticism that it not be possible. Admittedly, it is possible to produce an empirical case where a particular economic action is not unduly detrimental to environmental matters. It is equally possible to generate the opposite empirical case. This suggests that a document that is largely politically negotiated and presented as a policy path-setter still needs to be scientifically validated into action. The work remains at the initial stages, and there is not yet conclusive empirical proof that a trajectory that combines economic development with environmental concerns can override the pre-1992 Earth Summit patterns of industrial–economic evolution.

While relationships between the environment and development remain controversial, the reality is that most significant stakeholders act as if, by the application of political will and scientific and technological ingenuity and innovation, any residual tension that exists between them can be diffused and harmonised. I assume that development can be channelled along trajectories that will not impose much burden on the environment, given a shared belief and concerted action among all the significant actors and stakeholders involved. In other words, theoretically, there is a positive-sum game between them. In fact, some have suggested that industry, technology, and economic development can be re-directed to serve as the “engine” for the protection of the environment.

Agenda 21 was thus born as the task plan to facilitate implementation of the new combination of environment and development. It emerged after the Earth Summit set forth a policy orientation for governments, businesses, civil society stakeholders, and learning institutions to work in concert to “tame” or “discipline” economic growth from imposing further burdens on the environment. Thus a global policy concern not to evade responsibility for the environment came out of the global discourse of the United Nations Conference on the Environment and Development (UNCED), and it is enshrined in the principle of “common and differentiated responsibility” for the environment.

Agenda 21 has translated “common and differentiated responsibility” relative to the transfer and access of environmentally sound technologies (ESTs) to mean the following:

- facilitating access to state-of-the-art technology, especially to developing countries;
- promoting, facilitating, and financing access to and transfer of ESTs and know-how to developing countries “on favourable terms, including on concessional and preferential terms”;

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