

[Industrial Symbiosis in Kalundborg, Denmark: A Quantative Assessment of Economic and Environmental Aspects](#) [1]

"As a subdiscipline of industrial ecology, industrial symbiosis is concerned with resource optimization among colocated companies. The industrial symbiosis complex in Kalundborg, Denmark is the seminal example of industrial symbiosis in the industrial ecology literature. In spite of this, there has been no in-depth quantitative analysis enabling more comprehensive understanding of economic and environmental performances connected to this case. In this article some of the central industrial symbiotic exchanges, involving water and steam, in Kalundborg are analyzed, using detailed economic and environmental data. It is found that both substantial and minor environmental benefits accrue from these industrial symbiosis exchanges and that economic motivation often is connected to upstream or downstream operational performance and not directly associated with the value of the exchanged byproduct or waste itself. It is concluded that industrial symbiosis, as viewed from a company perspective, has to be understood both in terms of individual economic and environmental performance, and as a more collective approach to industrial sustainability."

(https://www.researchgate.net/publication/227770355_Industrial_Symbiosis_... [2])

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