

## Development of a synergy model for integrating NCC companies

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The petrochemical industry is a large scale and a capital intensive industry. The core competence of the industry is to achieve economy of scale. As the scale of the petrochemical company becomes larger, the cost per unit product is lowered and the market power is raised. Recently Korean petrochemical companies are faced with strong challenges. Raw material prices have risen rapidly and new investments in the China and the Middle East countries are expected to create a fierce price competition in the near future. An integration of petrochemical companies is an effective way to sustain the competitiveness. This study develops a synergy model for integrating NCC companies in a petrochemical complex. The model constitutes the optimum process network between raw materials, intermediates, and products of the companies with integration synergy. The model can be used to show the economical gains when the NCC companies are integrated.

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