



# *Brunei Darussalam Methanol Project*

*February 9, 2006*

*Mitsubishi Gas Chemical Co., Inc.  
Brunei National Petroleum Company Sdn Bhd  
ITOCHU Corporation*

## Outline of Methanol Project

Equity Share : MGC 50%, PB 25%, ITC 25%

Production Capacity : 2,500MT/day

850,000MT/year

Technology : Mitsubishi Methanol Process

Gas Supplier : Brunei Shell Petroleum Co.

Off-taker : Mitsubishi Gas Chemical Co.,Inc.

Employee : Appr. 120-130 persons

## Project Time line

Establishment of JVC : Q1 2006

Basic Engineering Design Works : Q1-Q3 2006

Finance Closure : Q1 2007

Commencement of Construction : Q1 2007

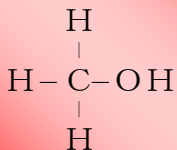
Mechanical Completion : Q1 2009

Commercial Operation : Q2 2009

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## What is Methanol ?

### Methanol



Clear liquid chemical



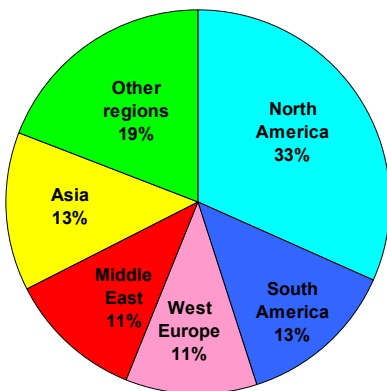
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## Features of Methanol

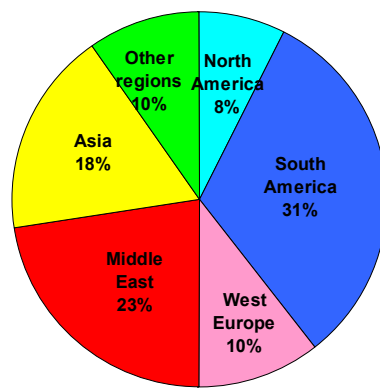
- Essential raw material
- Produced from natural gas mainly
- Wide variety of derivatives
- Growth of demand worldwide
- International trading actively
- Production shift to vast natural gas area

## Change of Methanol Production in the World

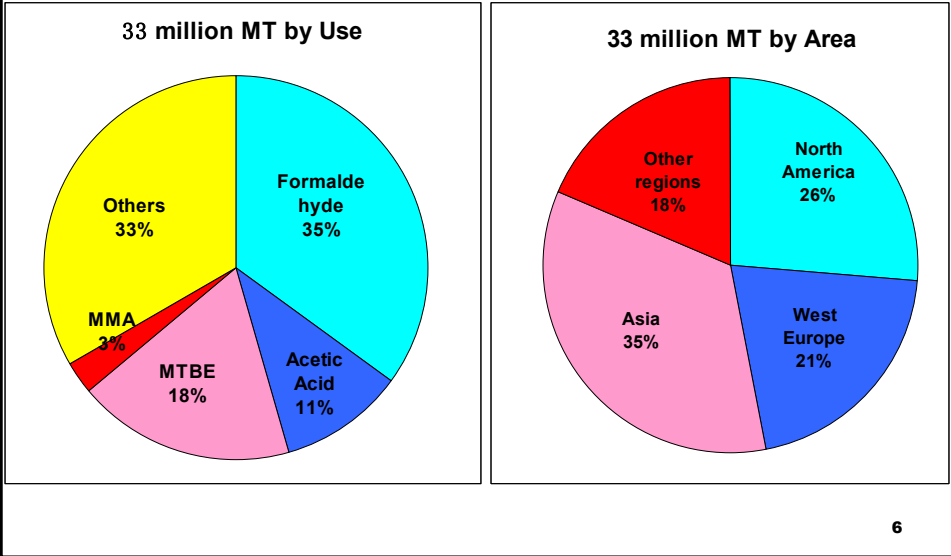
22 million MT in 1995



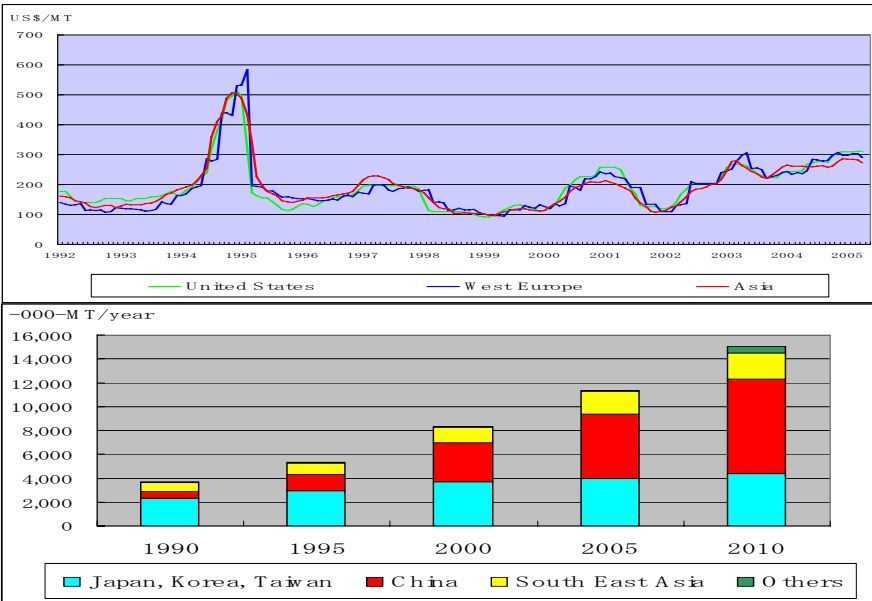
33 million MT in 2005



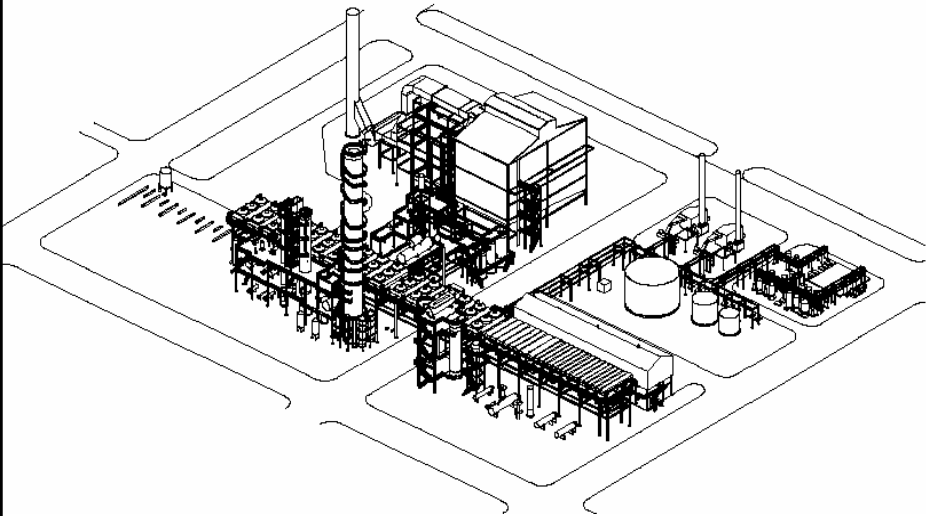
## Methanol Demand in 2005



## Historical Methanol Prices vs. Demand Growth in Asia



## Image of Methanol Plant



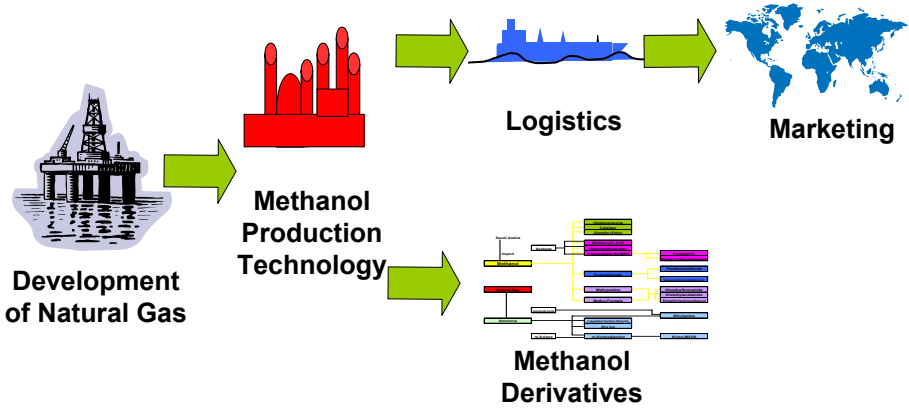
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## Example of Methanol Plant in Saudi Arabia



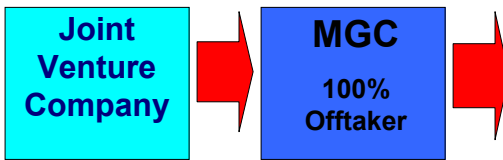
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## Flow of Methanol Business



## Marketing Concept for Brunei Methanol Project

### Marketing Concept



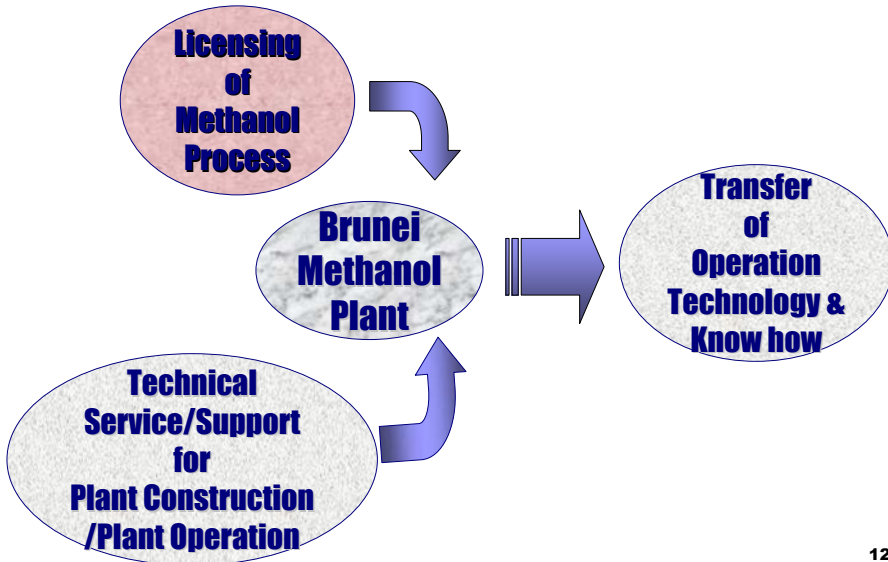
Utilization of MGC's Marketing Logistics & Global Networks



### Target market

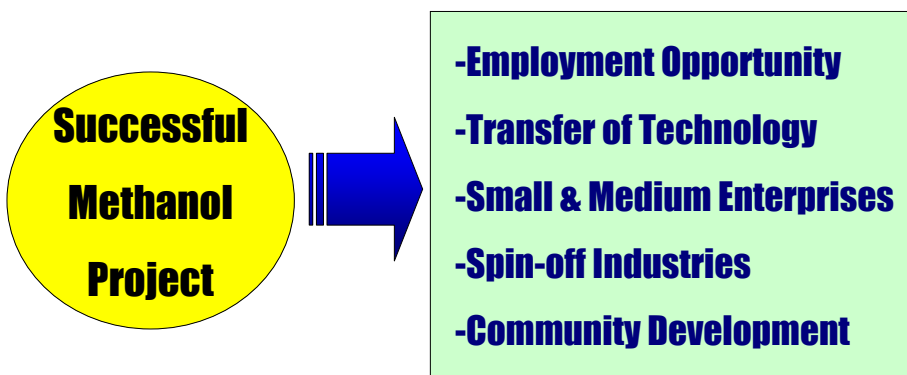


## Technical Support from MGC



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## Contribution from Successful Methanol Project



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## Employment Opportunities

### Target of Employment of Bruneian People in Methanol Project

1<sup>st</sup> :90% within 2 years from start of commercial operation

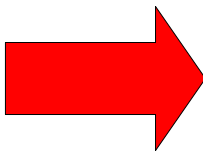
2<sup>nd</sup> :95% within 5 years from start of commercial operation

## Transfer of Technology

### Training

- On the Job Training
- Training Center
- Practice in MGC's J/V

### Transfer



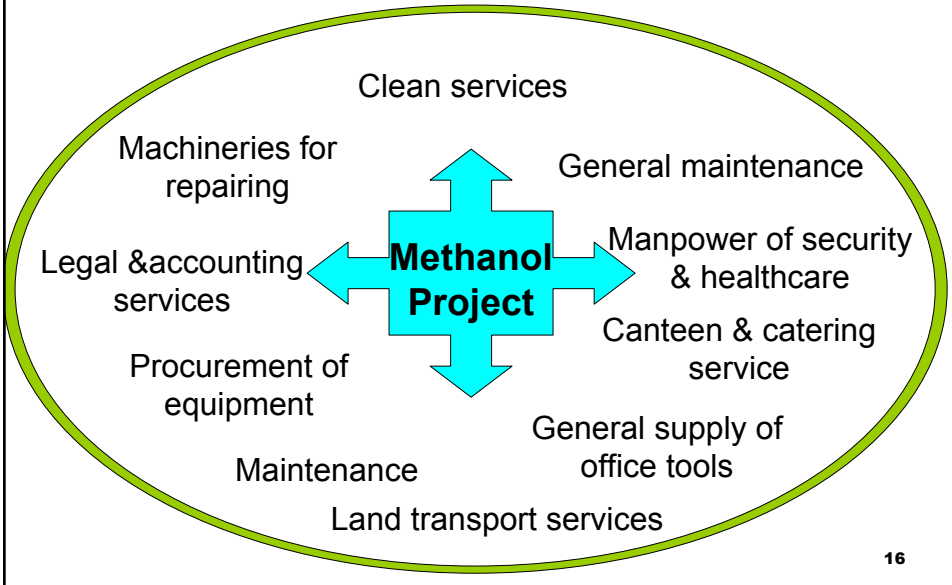
### Technology for

- Operation
- Maintenance
- Plant management

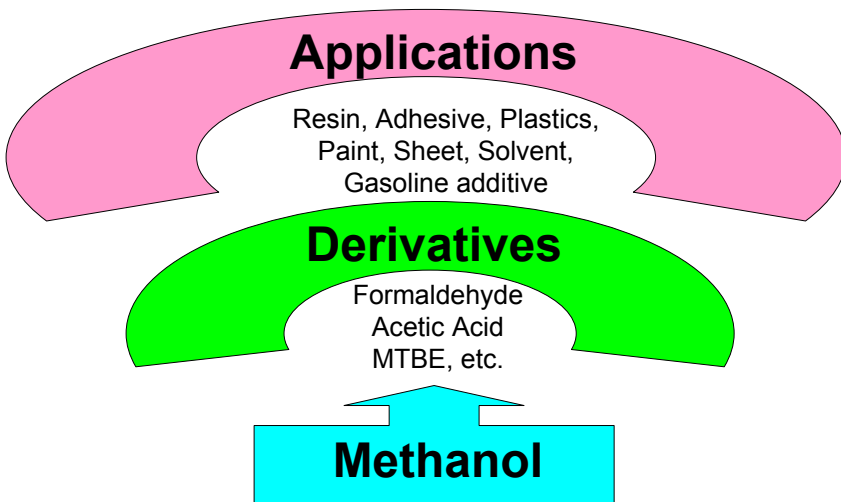
Based on MGC 's experiences in Saudi Arabia & Venezuela



## Development of Small & Medium Enterprises



## Development of Spin-Off Industries



## Community Development

### Explanations at the major milestones

- Financial Closure
- Commencement of Construction Work
- Commencement of Commissioning

### Create an opportunity for the resident people

- Traditional Japanese Festival
- Environmental Day
- Cleaning campaign
- Plant site tour

## Appropriate Environmental and Social Considerations



**Thank you  
for your kind attention**



***Mitsubishi Gas Chemical Co., Inc.  
Brunei National Petroleum Company Sdn Bhd  
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