

SPEECH BY: DATO' SERI DR. MAHATHIR BIN MOHAMAD
(PRIME MINISTER)

EVENT: THE OPENING OF GASTECH

VENUE: THE PUTRA WORLD TRADE CENTRE, KUALA LUMPUR

DATE: 18 OCT 1988

TIME:

Mr. Brian Singleton,
Conference Director of GASTECH '88;
Tan Sri Basir Ismail,
Chairman of PETRONAS;
Excellencies;
Distinguished guests;
Ladies and Gentlemen.

I would like to thank the organisers for choosing Kuala Lumpur as the venue for their 13th International LNG/LPG Conference and Exhibition. This is the first time since its inception in 1972 that the GASTECH Conference and Exhibition is being held outside of Europe. It is most gratifying and an honour for Malaysia to be the first non-European host to GASTECH. This distinguished gathering has placed Malaysia on the map of the natural gas world. To all GASTECH delegates, I bid welcome to Malaysia, and while you are here, I hope you will take time off to see our country and enjoy the warm hospitality of our people.

2. We are looking forward to the opportunities that GASTECH will bring, not only to Malaysia but also to the countries in the region. This international focus on gas will certainly create greater awareness of the role natural gas is playing in the international energy scenario, which until now has been dominated by oil and coal. The world is, I believe, making an important energy transition and we are on the threshold of an international gas era. Although natural gas may be versatile and have certain advantages over oil and coal, some technical constraints make it less transportable than traditional fuels. The international gas community will have to devote greater R&D effort in natural gas development and utilisation technology. As a gas producer, Malaysia looks forward to some technological breakthroughs in this field.

3. Natural gas as an energy source is something that we in Malaysia are only just beginning to exploit. We are luckily one of the gas-rich nations. To harness, develop and utilise this resource for domestic benefit and for export, is a major challenge for us. As such, we have certain expectations from this Conference and Exhibition. We hope GASTECH will bring us in closer contact with the developments in the exploitation and utilisation of natural

gas.

Ladies and Gentlemen,

4. The rapid development and utilisation of natural gas gained momentum only in recent years, fuelled by high prices for petroleum as an energy source. But apart from the ready availability of gas in many countries and the consequent price advantage, gas is also a clean fuel. In these days of concern for the environment, this clean fuel is very much desired. Additionally gas is the raw material for innumerable products. We suspect that we have not yet exploited the full potential of gas as feedstock for a whole range of synthetic material. Search for gas has resulted in the discovery of massive reserves amounting to some 3,800 trillion cubic feet which is almost equal to total oil reserves in energy equivalent terms. Although much of these reserves remain undeveloped, natural gas has been steadily increasing its share of the world energy mix. We have seen a rise in world gas production, marketed production and international gas trade. Currently, I believe, gas accounts for about 20% of the commercial fuels used around the world, compared with oil's share at 38% and coal's at 30%. This reflects not only the increasing role assumed by natural gas in supplying energy, throughout the world but also the technological advances in the handling of this volatile and explosive naturally occurring product.

5. Natural gas is becoming significant in the Far East economies too, although less dramatically than for other regions. Over the past five years, Australia, India and Indonesia have doubled their gas reserves. Natural gas production has increased notably in Australia, Brunei Darussalam, India, Indonesia, Malaysia, New Zealand and Thailand.

6. The region has also established some records in terms of usage of gas. Japan has become the world's largest importer of LNG, consuming about 75% of the total volume of LNG traded, while Indonesia has become the world's largest LNG exporter. Thailand still holds the record of having the world's longest submarine gas pipelines transporting natural gas from the Gulf of Thailand to power stations and industries in and around Bangkok.

Ladies and Gentlemen,

7. Malaysia has also taken the first steps into the gas era. The discoveries of commercial quantities of natural gas in the 1970s, our desire to reduce dependence on oil, and our need to minimise the flaring of associated gas have prompted us to accelerate the development of our natural gas resources. We have substantial reserves of natural gas still largely undeveloped. We are in a gas-rich geological province, and the potential discoveries are higher for gas than for oil. Today, our recoverable reserves including both associated and non-associated gas amount to about 52

TCF or the equivalent of 9.8 billion barrels of oil -- which is more than three times our oil reserves. Malaysia ranks 15th among countries in terms of size of reserves.

8. Natural gas is gaining importance in our economy as an energy resource and foreign exchange earner. And its role will continue to grow. Last year, the share of natural gas of the total energy consumption was 58,000 barrels of oil equivalent or 18%. We expect that by 1990 the share will increase to 27%, and by the year 2000, to 40%. The growth is expected to accelerate after 1991 with the completion of Stage II of the Peninsular Gas Utilisation Project, which will bring gas to the more densely populated industrialised areas on the West Coast. It is projected that gas consumption will increase in all sectors with the power and industrial sectors leading. By the year 2000, gas will dominate the power sector and some industries, and Liquefied Petroleum Gas and Compressed Natural Gas are expected to make some inroads into the transport sector. Piped gas or piped LPG will be a familiar feature in urban households. This is the likely energy scenario in the future.

9. Currently, the demand for electricity is about 17 gigawatts per hour which represents 24% of Malaysia's energy consumption. About 58% of our electricity is generated from oil with only 15% from gas. Our National Electricity Board envisages that by 1992, the electricity generated from gas will increase to 64%, with oil's share reduced to a mere 1%. Coal will contribute 20%, and hydro, 15%. Once the gas distribution trunk line is in place, opportunities will open for industrial, household and commercial sectors to exploit the potentials of natural gas.

10. On the export front, natural gas development has borne fruit. As you are no doubt aware, we are a producer of Liquefied Natural Gas or LNG. Our major foreign exchange earnings from gas come from the export of LNG -- from US\$330 million in 1983, revenues generated from LNG reached US\$996 million last year. Although we are pleased with the success of our plant, and with our LNG market in Japan, the declining prices and our dependence on two customers are two matters of concern to us. As such, we would like to see the LNG price stabilising somewhat, and we are also looking into developing new markets.

Ladies and Gentlemen,

11. The PGU II project will provide Malaysia with further opportunities to export gas. We have recently reached agreement with Singapore on the purchase of Malaysian natural gas. This is a new arena of the gas trade which we will be entering. It is the beginning of gas export via pipeline in the Asia-Pacific region. We will be exploring the possibility of cooperation with Thailand in a similar way, and to negotiate with our northern neighbour to supply natural gas to the power stations they will be building in southern Thailand.

12. Natural gas provides an excellent resource base for a domestic petrochemicals industry. With the completion of the PGU II project, feedstock for petrochemicals in the form of ethane, propane and butane will be available in sufficient quantities. PETRONAS, our national petroleum corporation, will be producing MTBE and polypropylene from propane and butane.

13. Malaysia's other petrochemicals venture will probably be a world-scale ethane cracker to produce ethylene and polyethylene for use by the downstream domestic plastics industry and for export. We hope that when locally-produced polyethylene becomes available, domestic plastics manufacturing will develop into a vigorous and dynamic industry.

14. As you can see, Malaysia is poised to become a full-fledged gas player: an exporter and domestic consumer. This GASTECH Conference and Exhibition has come about at a most opportune time. The international gas community will be able to see for itself the developments that are taking place here. Hopefully, they will see opportunities for themselves, and at the same time contribute to increasing the reservoir of knowledge and expertise in the industry. We in Malaysia will have the first-hand opportunity to learn more about the gas industry, especially from those of you who have had a headstart in this business.

15. As a producer of natural gas we are looking for advances in new technologies, which would help reduce the cost of development and extraction, and the cost of distribution and transportation. R&D and interaction among countries, both producer and consumer, will hopefully result in the required technological breakthroughs.

Ladies and Gentlemen,

16. Having decided on natural gas as a desirable alternative energy source, we are now in the process of developing appropriate strategies to create awareness of the potential of gas and to provide the infrastructure for increased utilisation of gas. We will be working closely with the various industries, to determine what role gas can play in their various processes and production techniques. In this there will be opportunities for the private sector to participate and embark on new areas of business and manufacturing.

17. The development of natural gas has brought us into a new energy era. We hope it will provide Malaysian industries and manufacturers with the competitive edge they need to succeed, both locally and internationally.

Ladies and Gentlemen,

18. Finally, I would like to wish all of you a pleasant

stay in Malaysia and a fruitful conference. Now it is with much pleasure that I declare this GASTECH '88 Conference and Exhibition open.