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## Energy and Security in Asia.

Assessing the Situation, Evaluating the Responses.

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A thesis presented in partial fulfilment of the degree of Master of Philosophy in  
Defence and Strategic Studies at Massey University.

Tyson Charles Schmidt.

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This thesis is dedicated to the memory of Associate Professor Norman Austin, who never accepted half-hearted efforts from me. I hope this thesis is acceptable to you Norman.

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## Abbreviations.

ACE	ASEAN Centre for Energy.
ADB	Asian Development Bank.
ANRE	Agency of National Resources and Energy (Japan).
APEC	Asia-Pacific Economic Cooperation.
APEC EWG	APEC Energy Working Group.
APERC	APEC Energy Research Centre.
ARF	ASEAN Regional Forum.
ASCOPE	ASEAN Council on Petroleum.
ASEAN	Association of South East Asian Nations.
BP	British Petroleum.
bpd	barrels per day.
CNPC	China National Petroleum Company.
CO <sub>2</sub>	Carbon Dioxide.
CSCAP	Council for Security Cooperation in the Asia Pacific.
CWC	Chemical Weapons Convention.
EIA	Energy Information Agency.
FBIS	Foreign Broadcast Information Service.
FEER	Far Eastern Economic Review.
FPDA	Five Power Defence Arrangements.
FSU	Former Soviet Union.
GATT	General Agreement on Tariffs and Trade.
GDP	Gross Domestic Product.
GNP	Gross National Product.
IAEA	International Atomic Energy Agency.
IEA	International Energy Agency.
IEO	International Energy Outlook.
IMF	International Monetary Fund.
JNOC	Japan National Oil Corporation.
KEDO	Korean Peninsula Energy Development Organisation.
LNG	Liquefied Natural Gas.
mbd	million barrels of oil per day.
MITI	Ministry of International Trade and Industry (Japan).

MOTIE	Ministry of Trade, Industry and Energy (South Korea).
mt	million tonnes.
MTCR	Missile Technology Control Regime.
mtoe	million tonnes of oil equivalent.
NEPA	National Environmental Protection Agency (China).
NEPC	National Environmental Protection Committee (China).
NESO	National Emergency Sharing Organisation (Japan).
NIE	Newly Industrialised Economies.
NOC	National Oil Company.
NO <sub>x</sub>	Nitrus Oxide.
NPT	Nuclear Non-Proliferation Treaty.
NT2	Nam Theun 2 Hydroelectric Project (Laos).
OECD	Organisation for Economic Cooperation and Development.
OPEC	Organisation of Petroleum Exporting Countries.
SO <sub>2</sub>	Sulphur Dioxide.
TPES	Total Primary Energy Supply.
TWh	Terra Watt hours.
UN	United Nations.
UNCLOS	United Nations Convention on the Law of the Sea.
VLCC	Very Large Crude Carrier.
WEC	World Energy Council.
WEO	World Economic Outlook.
WTO	World Trade Organisation.