



## Prospects for enhancing energy security in Asia and the Pacific through regional trade



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## **Abstract**

Growing demand for raw materials and the expansion of the productive capacity of emerging economies have exacerbated the region's high resource dependence, especially in energy, such as fossil fuels. A growth in energy demand, coupled with the high price volatility and dependence on fossil fuels, has made efforts for energy security more challenging than before. The Asia-Pacific region as a whole has increased its share of global commodity imports, across all sectors (minerals and metals, fuels and agriculture) over the last five years (2009 to 2013), from 26% to 30%, based on nominal values. Growth in energy demand, coupled with the increasing price volatility and dependence on fossil fuels, has made efforts for energy security more challenging than before.

The Asia-Pacific economies hold vast amounts of fossil and non-fossil energy resources. As a region, it is a net exporter of coal, natural gas (through the pipeline), and electricity, but a net importer of oil and liquefied natural gas (LNG). Owing to accelerated levels of economic development, region's demand continued to grow. This increased demand is not being met with a sufficient rise in production, leading to reduced exports and increased import demand. Despite holding vast coal and natural gas reserves, demand for fossil fuel in Asia and the Pacific is increasingly being met by imports with long term effect on its trade balance.

To enhance energy security, which is essential for inclusive and sustainable growth, countries of Asia-Pacific will have to strengthen energy cooperation, build regional connectivity, and invest in adequate infrastructure. Growing import dependency coupled with emergent regionalism has certainly enhanced the prospects for regional energy cooperation and integration of the energy sector, which can enhance the possibility of regional energy security. However, due to its diverse nature, such cooperation is confined to national initiatives rather than at a pan Asia-Pacific or sub-regional levels.

The paper examines the prospects for enhanced energy security through regional energy trade and integration by exploring the case of the Asia-Pacific Trade Agreement (APTA). The paper concludes by stating that regional cooperation for achieving energy security collectively is a viable alternative to traditional individual or bilateral attempts and that the Asia-Pacific Trade Agreement is an ideal vehicle for providing energy security through enhanced trade due to tariff concessions to be offered on energy products and also through expansion of its membership to the energy supplying countries.

**Keywords:** Energy trade, Energy security, Exports, Liberalization, Regional trade, APTA, Preferential trade,

**JEL classification:** F 15, F 18, Q 37 and Q 41

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## 1. Introduction

Trade and investment are engines of growth for Asia and the Pacific. In 2012, the region surpassed Europe to become the world's largest trading region. The general decline in import demand in developed countries continues to fuel the growth of South-South trade, further strengthening the role of Asia-Pacific as most of South-South trade is contributed by this region. Therefore, intraregional exports experienced an increase in the total share of exports of these countries from 40% to 51% in the period from 2000 to 2012 (ESCAP, 2014). However, the merchandise trade in Asia and the Pacific in 2015 continues to face significant challenges due to the regional as well as global macroeconomic outlook. ESCAP (2015a) estimated that export receipts of Asian and Pacific economies grew sluggishly, at a rate of 2.5% in 2014, while imports declined by 1.2%.

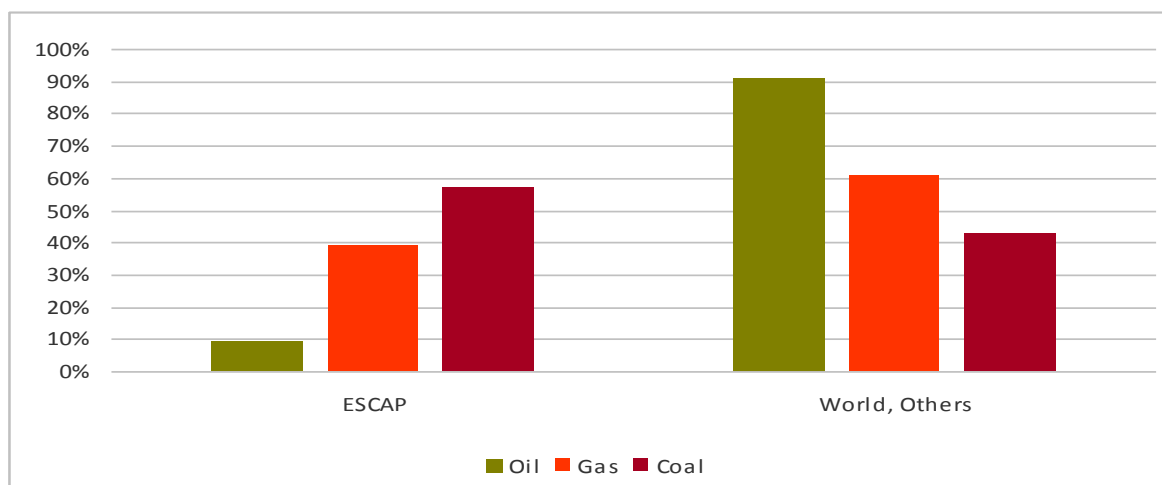
Growing demand for raw materials and the expansion of the productive capacity of emerging economies have exacerbated the region's high resource dependence, especially in energy resources, such as fossil fuels. The Asia-Pacific region as a whole has increased its share of global commodity imports, across all sectors (minerals and metals, fuels and agriculture) over the last five years (2009 to 2013), from 26% to 30% (ESCAP 2015b and 2015c). The region's rising import bill for energy and commodities worsened its trade deficit, resulting in a net deficit with the rest of the world in 2012 (ESCAP, 2013a). Thus, growth in energy demand, coupled with the increasing price volatility and dependence on fossil fuels, has made efforts for energy security more challenging than before. Between 2011 and 2013, the import share of petroleum products in the Asia-Pacific region remained at 16%, while the export share declined from 12% to 11%. Furthermore, growing demand has raised the price of energy resources in the last few years.<sup>1</sup> The overall impact of falling oil prices depends on the nature of oil-dependence (oil-importing or oil-exporting) of economies (ESCAP 2015d). ADB (2014) estimated that net oil importers in the region could see an additional 0.5% growth in 2015 GDP if oil prices remain low. The low oil prices also lowered inflation rates and present opportunities for importers such as Indonesia and India to reform their programs on fuel subsidy. For oil-exporting countries, such as the Russian Federation and other Central Asia countries, growth would be negatively impacted depending on the role of the energy sector in the national economy.

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<sup>1</sup>With the exception of fall in oil prices. By early 2015 the international oil prices drastically declined 47% and then rebounded in a bit in February 2015. (Source: EIA, 2015).

The Asia-Pacific economies<sup>2</sup> hold vast amounts of fossil and non-fossil energy resources. As a region, it is a net exporter of coal, natural gas (through the pipelines), and electricity, but a net importer of oil and liquefied natural gas (LNG). Owing to accelerated levels of economic development, internal demand is constantly rising in the region. This increase is not being met with a sufficient rise in production, leading to reduced exports and even higher pressure for imports. Despite holding vast coal and natural gas reserves (figure 1), demand for fossil fuel in Asia and the Pacific is increasingly being met by imports and its trade surplus will be reduced over time. The Asian Development Bank (ADB) expects net imports<sup>3</sup> of fossil fuels (oil, coal, and natural gas) in the Asia-Pacific region to nearly double from 830.5 million ton of oil equivalent (Mtoe) in 2010 to 1,515.5 Mtoe in 2035 (ADB, 2013).

**Figure 1: Contribution of Asia-Pacific economies to world fossil fuel resources**



*Note:* Oil and natural gas reserves as of 1 January 2012; coal reserves as of 31 December 2008.

*Source:* EIA International Energy Statistics, <http://www.eia.gov/cfapps/ipdbproject/IEDIndex3.cfm> (accessed November 2013).

Asia-Pacific economies face greater challenges relating to energy security,<sup>4</sup> which is essential for inclusive and sustainable growth. Without greater energy cooperation, building

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