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# Financing the expansion of global energy: the role of SWF investment as strategic private equity



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### 8. FINANCING THE EXPANSION OF GLOBAL ENERGY: THE ROLE OF SWF INVESTMENT AS STRATEGIC PRIVATE EQUITY<sup>1</sup>

#### Introduction

By any measure, the role of the energy sector in any economy has strategic implications for both economic development and national security. Countries that are predominantly or rapidly emerging energy consumer nations struggle to sustain economic growth, while insuring adequate access to future energy sources. In many such countries, the energy sector is controlled or dominated by state-owned or government-linked corporations, further adding to the complexity of strategic sourcing. Countries that have long been energy producers, particularly those of the Persian Gulf region, face a different set of strategic challenges. For them, energy revenues have been a significant and critical contributor to public finance<sup>2</sup>. However, because their long-term growth is linked to depleting real assets, they have sought first to transform their energy wealth into deployable financial assets and then to diversify their economies to support long-term multi-sector sustainability. Here too governments are the key actors in this strategic transition, controlling real, productive, and financial assets through sovereign or government-linked entities.

The strategic consequences associated with both the production and consumption of energy have been accentuated in recent years as the world has undergone a quiet revolution in energy sourcing. Technological advances have facilitated access to “unconventional” sources of both oil and gas, even as renewables become more economically viable. These developments have the potential to significantly modify the structure of global supply and demand for energy and so the economics that in part drive energy security. This shift promises to be especially impactful in the case of the US, where dramatic increases in the production of shale oil and gas have already reduced imports and further increase energy diversity, while potentially even converting the US into a net exporter in the future. More broadly the macro-economic implications of unconventional sources, particularly for consuming economies, will have global impacts as the combination of transferrable technology and distributed source rock increases the potential that other economies will have the opportunity to reduced their dependence on imported energy over time<sup>3</sup>.

Forward-looking estimates for future investment to develop the global energy sector vary widely, but are generally consistent with

respect to the enormity of the overall scale. Whether McKinsey Global Institute, who estimates the power component of cumulative global infrastructure investment to be close to \$10 trillion by 2030, or the International Energy Agency<sup>4</sup>, who estimates cumulative upstream oil and gas investment at \$15 trillion by 2035<sup>5</sup>, the scale of future energy investment is well beyond the capacity of the private sector alone to fund. Rather global energy investment necessarily requires active state engagement to facilitate scalability, insure geostrategic access, transcend investor horizons, and mitigate geopolitical risk.

Given the transitional nature of global energy sourcing and the tight link between energy use and economic development, long-term returns on investment across key components of the sector—unconventional sources, renewables, and both up and down stream services—are attractive to institutional investors who anticipate expanding energy usage along with the sustained growth of emerging and frontier economies. Bain & Company’s most recent annual study on global private equity<sup>6</sup> reports that the energy sector has become a “magnet” for private equity as evinced by the growth of new sector-focused funds and the volume of both M&A and new direct investment. Whereas prior to 2009 much of the new investment in energy was concentrated in the power and utility subsector, since then renewables and other components of the oil and gas value chain—including oilfield equipment and services—have attracted sizable direct investment. Bain expects this trend to continue, driven in part by annual worldwide capital and operating expenditures within the industry of over \$1 trillion. Similar sentiments have been expressed by Chia Song Hwee, Temasek’s Co-Head of Portfolio Management, who sees energy and resources as a “growth segment” with “great long-term potential”<sup>7</sup>.

The similarities, and in fact synergies, between private equity and large sovereign wealth funds (SWFs) have been widely acknowledged. Those funds with both the capacity and scale to maintain direct investment programs augment asset allocation strategies, supplementing PE limited partnership investments with in-house managed portfolios. Like their private counterparts, SWFs too have been attracted to the energy sector, having directly invested USD \$75-100 billion by some estimations<sup>8</sup>, much of this since 2009. SWFs expend considerable effort to establish themselves as financial investors and to disavow association with multi-impact or “double bottom line” investing, particularly when perceived to involve the geopolitical interests of the sovereign.

<sup>1</sup> The author wishes to thank Michael Joyce, MIB candidate at the Fletcher School, for his research assistance and technical expertise.

<sup>2</sup> See Sven Behrendt, “Beyond Oil: Global Energy Security and Sovereign Wealth Funds”, 26 July 2010, accessed at [http://www.ensec.org/index.php?option=com\\_content&view=article&id=252:beyond-oil-global-energy-security-aamp-sovereign-wealth-funds&catid=108:energysecuritycontent&Itemid=365](http://www.ensec.org/index.php?option=com_content&view=article&id=252:beyond-oil-global-energy-security-aamp-sovereign-wealth-funds&catid=108:energysecuritycontent&Itemid=365).

<sup>3</sup> Lisa Hyland, et al, “Realizing the Potential of U.S. Unconventional Natural Gas”, *Center for Strategic & International Studies*, April 30, 2013, p 4.

<sup>4</sup> See McKinsey Global Institute, “Infrastructure Productivity: How to Save \$1 Trillion a Year”, January 2013.

<sup>5</sup> See International Energy Agency, “World Energy Outlook 2012 Executive Summary”, accessed at <http://www.iea.org/publications/freepublications/publication/English.pdf>.

<sup>6</sup> See Bain & Company, “Global Private Equity Report 2013”, pp 32-34.

<sup>7</sup> “Temasek Spends More on Investments, Adds Energy Holdings”, *Bloomberg* 5 July, 2012.

<sup>8</sup> See UN Conference on Trade and Development, “World Investment Report 2012”, particularly, pp 13-16 and Table 1.6.

However, as a practical matter, it would be naïve and perhaps disingenuous to consider SWF investment in energy-related projects in strictly financial terms. In this short brief, our objective is rather to examine SWF investment in the energy sector as strategic private equity.

### The Case of SWF Investment in Energy

To assess the scope and scale of SWF investment in the energy sector, we conducted a detailed empirical analysis of direct investments by SWF in related energy subsectors using the Fletcher SWF Transaction Database<sup>9</sup>. The database was supplemented with fund host country macro-economic data in order to better understand the relationship of the fund to the domestic energy profile of the SWF host country. We identified over 200 individual SWF transactions in the energy sector since 1986. For purposes of the present analysis, we further constrain our study from 2004 to the present. We found that this period contained nearly 80% of the total transactions in our sample and allowed us to better isolate a structural transition that appears to be underway in energy investment.

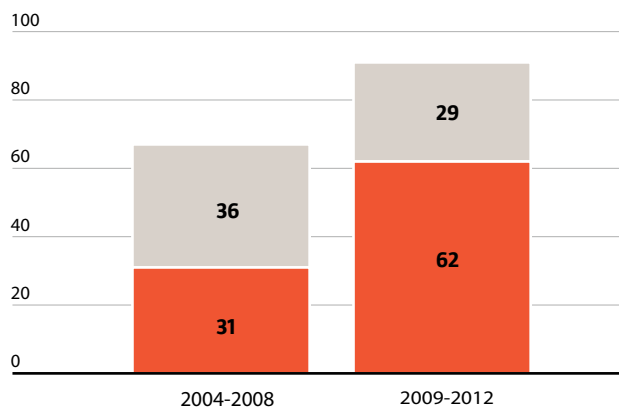
First to note, we are able to trace 94% of the transactions since inception to ten funds in six countries, which divide conveniently along consumption/production lines. Funds from consumer countries include the China Investment Corporation, Government Investment Corporation of Singapore and Temasek (both from Singapore), and Korea Investment Corp. Among producers funds include Abu Dhabi Investment Authority, International Petroleum Investment Corporation, Istithmar, and Mubadala (all of UAE), Kuwait Investment Authority, and Qatar Investment Authority. Taken together these ten funds constitute over \$2 trillion or nearly 40% of the approximately \$5.5 trillion of total assets managed by SWFs globally. Taking the global financial crisis of 2008 as a natural inflection point, we further segmented the sample from 2004-08 and 2009-2012, along the lines suggested by Bain for private equity. We find (see Chart 1) that whereas funds from both producer and consumer countries invested equally in total deal count prior to the crisis, in its aftermath, funds from consumer countries, led largely by Temasek and the rapid emergence of the CIC and KIC, have outpaced investment by their producer counterparts by over 2 to 1.

<sup>9</sup> The database was originally created by the Monitor Group.

Chart1  
Ten most active SWFs

Number of transactions by country type

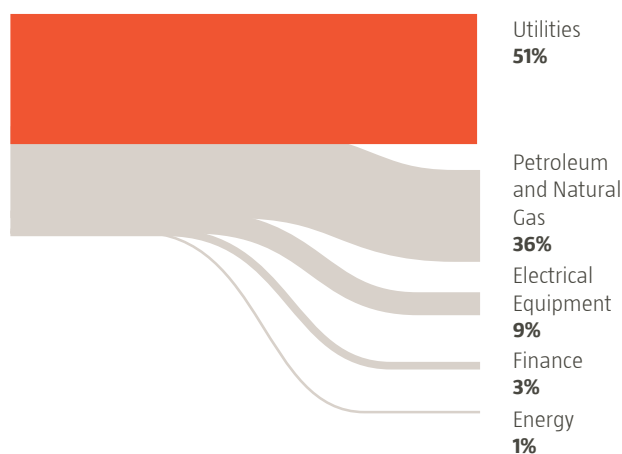
● Consumer ● Producer



Source: The Fletcher SWF Transaction Database (2013)

Also, consistent with the Bain analysis for PE generally, sectoral allocation of SWF investment in energy has also shifted markedly since the financial crisis. As indicated in Chart 2, in the years preceding the financial crisis, over 51% of SWF energy-related transactions were in utilities, followed by investments in petroleum and natural gas. During this period Temasek and Mubadala were among the most active investors in both subsectors.

Chart2  
Allocation of SWFs Energy Transactions (2004-08)



Source: The Fletcher SWF Transaction Database (2013)

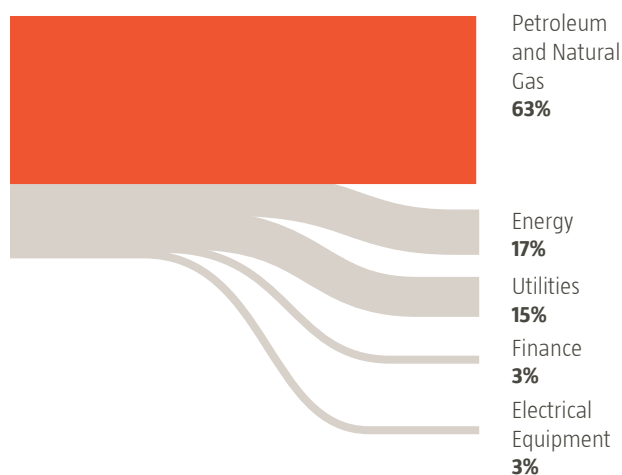
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Since the crisis, SWFs have shifted investment away from the utility subsector to petroleum, gas, and other energy related projects (see Chart 3). This is reflective of the technological and production advances in unconventional sources, but also substantially increased interest in renewables, as a source of strategic diversification. In this period, nearly 80% of total transactions consist of resource and other energy-based deals, including renewables. Investments by SWFs of the Asian consumer countries dominate the former as these countries attempt to diversify from strategic sourcing perspective. An interesting representative example is Temasek's recent investment to establish Pavilion Energy Pte. Ltd. to diversify its resource economy and increase its energy assets. Pavilion will focus on the liquefied natural gas (LNG) industry and specifically invest in upstream project development, storage and re-gasification terminals, and LNG shipping<sup>10</sup>.

Conversely, funds from producer countries have shown considerable interest in the renewable energy sector as a means to diversify their economies away from a continued dependence on hydrocarbon revenues<sup>11</sup>. Representative of the latter is the UAE's attempt to establish a center of excellence in renewable energy working through Mubadala's investment in Masdar, established in 2006. Masdar is a wholly owned state-enterprise of Mubadala, whose mission is to serve as "a catalyst for the economic diversification...guided by Abu Dhabi Economic Vision 2030"<sup>12</sup>. Recently Abu Dhabi and the UK announced the signing of a memorandum to establish a co-investment framework between Masdar and the UK's Green Investment Bank to facilitate investment in renewable projects in the UK<sup>13</sup>. Similarly, in Qatar, a major source of global natural gas reserves, the QIA shares a diversification mission and has similarly embraced the renewable sector. Representative of its investment agenda in the subsector are deals on the Iberian Peninsula with Iberdrola (Spain) and EDP (Portugal)<sup>14</sup>.

Chart 3

### Allocation of SWFs Energy Transactions (2009-12)



Source: The Fletcher SWF Transaction Database (2013)

Finally, from a locational or geographic perspective, the deals in our sample are overwhelming outbound (80%) to the investing fund, i.e. there is little evidence of home bias by SWFs in the sector. In some respects this is consistent with the strategic nature –particularly source diversification– of the transactions. Geographically (see Chart 4), North America, Asia, MENA, and Europe have experienced the highest intensity of deal and capital flows. Among funds in consumer countries, perhaps expectedly, North America and Asia dominate. Among funds in producer countries, again perhaps expectedly, Europe, MENA, and Asia have attracted the majority of deals.

<sup>10</sup> "Singapore's Temasek Launches New Firm for LNG Investments", *Reuters*, 5 April 2013.

<sup>11</sup> Simone Tagliapietra, "Investing In the Energy Sector: Evidence from China and The Gulf", *Polinares Working Paper*, N° 76, 12 December 2012.

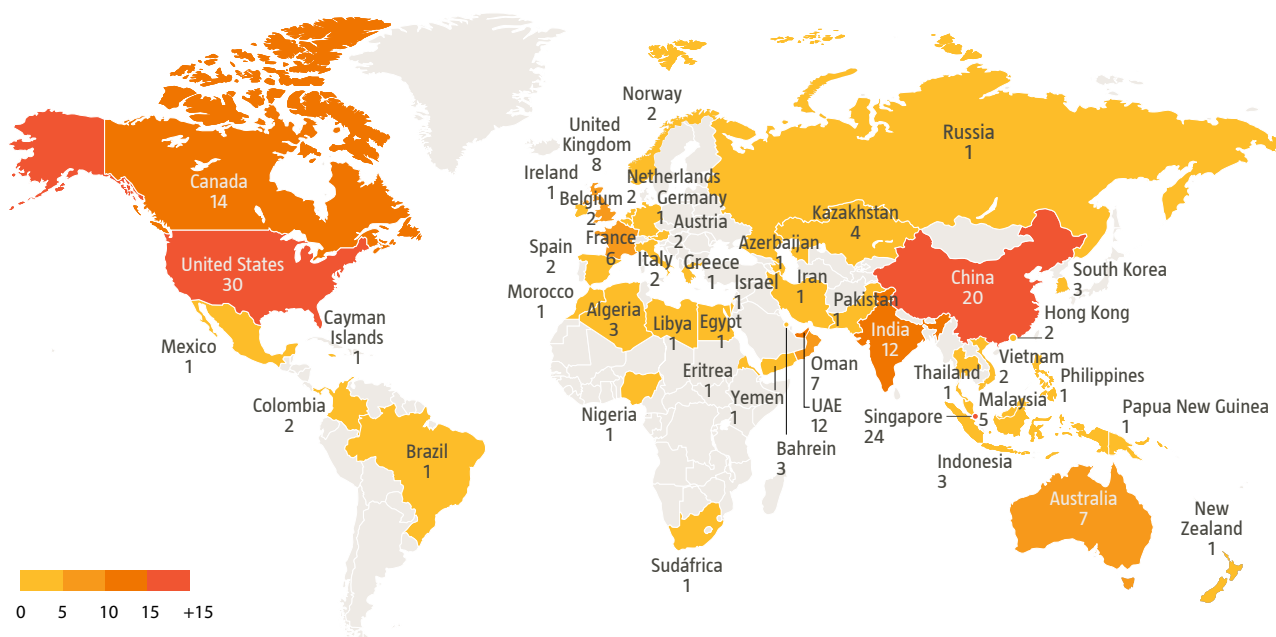
<sup>12</sup> See <http://www.masdar.ae/en/masdar/detail/launched-by-the-abu-dhabi-leadership-in-2006-with-the-mission-to-advance-re>.

<sup>13</sup> "Abu Dhabi Posed for UK Clean Energy Deal", *Financial Times*, 29 April 2013.

<sup>14</sup> Tagliapietra, *op cit*.

Chart 4

## Number of Deals by Country



Source: The Fletcher SWF Transaction Database (2013)

### SWFs as Strategic Private Equity

SWFs –most especially the large funds that actively participate in global energy investment– occupy a unique position as global institutional investors with inherent competitive advantages. These funds are not burdened with substantial short-term liabilities and so generally have low liquidity requirements. For this reason they have the potential to enjoy longer effective investment horizons and exploit liquidity premia that other investors must pay. In addition, longer investment horizons also afford SWFs some insulation from the volatility of equity returns and thus better equip them to harvest equity risk premia<sup>15</sup>. This is especially true when investing in alternative asset classes and especially private equity. Importantly, it is these same attributes that enhance the appeal of SWFs as investment partners –both for private equity portfolio companies and co-investors.

Unlike other investment managers, SWFs are also unique in having asset owners whose interests are intimately linked with those of the state as a whole and whose stewardship over the assets is not

isolated simply by virtue of the organizational distance that a SWF structure provides. Thus, funds may also share non-financial objectives of their stakeholders, particularly those related to advancing national strategic economic goals. Dyck and Morse, in studying the portfolio decisions of SWFs, construct a model of portfolio choice, which attempts specifically to assess the role of strategic economic or state planning interests in motivating SWF asset allocation decisions. They use the existence of a national strategic plan in the SWF’s host country –as in the case of Abu Dhabi’s Economic Vision 2030– as their proxy for strategic motivation and find evidence that SWFs do in fact share the national strategic planning objectives of the state and reflect these in their investment decisions<sup>16</sup>. Interestingly, the access to state resources and other state assets<sup>17</sup> –including political resources– that strategic private equity may afford the SWF, can add further to its competitive advantages as a global investor.

Haberly<sup>18</sup> examines this aspect of SWF strategic behavior. He defines strategically oriented SWFs as those who seek to advance both

<sup>15</sup> Scott E. Kalb, “The Growing Trend in Cooperation among Sovereign Wealth Funds”, latter published in Donghyun Park, *Sovereign Asset Management for a Post Crisis World*, 2011. At the time of his writing, Kalb was Chief Investment Officer of the Korea Investment Corporation.

<sup>16</sup> Alexander Dyck and Adair Morse, “Sovereign Wealth Fund Portfolios”, *Initiative on Global Markets, University of Chicago, Booth School of Business, Working Paper No. 61*, 2011.

<sup>17</sup> We include here as well strategic political intelligence.

<sup>18</sup> References here are to Daniel Haberly, “Strategic Sovereign Wealth Fund Investment and The New Alliance Capitalism: A Network Mapping Investigation”, *Environment and Planning A*, 2011, Vol 43, pp1833-1852.

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shareholder value, in the form of financial return, but also national stakeholder value through the development of specific relationships, which advance national, particularly economic, interests. Furthermore he moves beyond the strategic motivations of any single fund to consider the role of the SWF—through investment and operating partnerships—to operationalize the globalization of the sovereign's strategic agenda. In doing so he elevates various network-based affiliations between the state and corporate sectors into an emerging system of 'state-led global alliance capitalism', which integrates the objectives of the SWF with those of recipient states and their multinationals. In this system, the SWF leverages its competitive advantage by offering stable, long-term capital, a degree of political risk mitigation, and access to expanded business opportunities both within and beyond its jurisdiction, in exchange for improved access to technology, resources, or markets.

Conceptually, some of what Haberly describes, in the broader context of state-corporate relations, can be understood as a logical extension of the development role of the state, particularly in Asia. The developmental state has long been studied as a vehicle to mobilize scarce resources for rapid national economic development. Discrete state entities, including state-owned or government-linked enterprises, planning agencies, and financial or economic ministries have been active direct and indirect investors, encouraging the contribution of private capital into state-sponsored projects through commitments of both financial and political resources<sup>19</sup>. As SWFs have proliferated particularly since 2000<sup>20</sup>, they have taken a place in this national development agenda<sup>21</sup>, which positions them squarely in the global nexus of states, private capital, and global corporates.

### Co-Investor as Strategic Partner

Bain & Company view SWFs as attractive investment partners because, whether through energy revenues or surplus foreign currency reserves, they hold large and expanding pools of capital, which they seek to deploy in higher-earning alternative investments. Beyond capital, SWFs enjoy great appeal to private equity general partners (GP) as they represent patient capital invested over long time horizons that can participate as a traditional limited partner or as co-investor, but can also offer ancillary benefits in the case of mutual interest in a target company. Bain estimates that the 10 largest SWFs could invest between \$30 billion to \$60 billion in private equity over the next several years.

SWFs also acknowledge the benefits of strategic partnering through direct co-investment. According to Scott Kalb, former Chief Investment Officer of the Korea Investment Corporation, these include the ability to establish economies of scale through direct investment, generally lower transaction costs attributable to shared due diligence expenses and fewer fees to private equity GPs, risk reduction through joint monitoring and pooling of shared interests, and mitigation of political risk that may result from perceived conflicts of interest with recipient country stakeholders.

Given the strategic dimensions of the global energy sector and the scope and scale of current and future required investment, we further dissected our energy transaction sample for evidence of networked strategic partnering. Our approach was to focus on co-investment patterns exclusively in the global energy sector involving SWFs, particularly since the financial crisis. We identified 19 transactions (see Table 1) with a SWF at the center of the deal, which involved a co-investment partnership. The nature of the co-investment alliance varied with respect to institutional participation. However, consistent with Haberly, we were able to identify a large and extensible system of alliances that intersect public and private sector institutions—government, financial, and corporate.

<sup>19</sup> To clarify, globalizing the development model in East Asia through state investment seemed always part of the state's agenda. A case in point is the author's involvement in the early development of the venture capital industry in Taiwan (ROC), where the ROC Ministry of Finance sponsored and participated as limited partner in an early stage VC fund, managed by a US technology multinational as general partner. The MoF was motivated both by the need to promote a local VC market and access to technology-based DFI and foreign markets for Taiwan's value-added technology products. Its participation and "guidance" led over twenty of the largest Taiwanese corporations joining as limited partners.

<sup>20</sup> For a detailed analysis of the buildup of SWFs, see Eliot Kalter and Patrick J. Schena, "Into the Institutional Void: Managing the Sovereign Wealth of Emerging Economies", forthcoming as a chapter in *Investing in Emerging and Frontier Markets*, Euromoney Books, 2013.

<sup>21</sup> It is important to caveat that this role—especially in the case of Asian SWF—is not tightly integrated from a development perspective and still evolving. See for example, Saadia M. Pekkanen and Kellee S. Tsai, "The Politics of Ambiguity in Asia's Sovereign Wealth Funds", *Business and Politics*, Vol. 13 [2011], Iss. 2, Art. 3.

Table 1

## Selected Energy Co-Investment Deals

Investment	Investors	Country of Target	Sector	Year
Amyris	Temasek, Total Gas & Power USA, SAS, Naxyris SA, Biolding Investment SA	USA	Energy	2012
Barclays Natural Resource Investments	QIA, Qatar Asset Management Company, Qatar Financial Centre Authority	UK	Finance - Nat Rsc PE Fund	2012
BG Group Project	CIC, CNOOC Group	Australia	Petroleum and Natural Gas	2012
Cheniere Energy Partners	CIC, GIC	USA	Petroleum and Natural Gas	2012
Sunshine Oil Sands	CIC, Sinopec Group, EIG Global Energy Partners	Canada	Petroleum and Natural Gas	2012
Tamar Energy	Brunei Investment, ADIC, Khazanah, and the Al Subeaei Group, RIT Capital Partners plc, and Fajr Capital	UK	Energy	2012
CITIC Resources	Temasek, KIA, NSSF, BTG Pactual, Fubon Life Insurance, Och - Ziff Capital Management, NSSF	China	Petroleum and Natural Gas	2011
Consortium 5 Power Plants	GIC, Arclight, GE Energy	USA	Utilities	2011
Enogex Holdings LLC	CIC, GIC, John Hancock Financial Services, Northwestern Mutual Life Insurance Company, Arclight	USA	Petroleum and Natural Gas	2011
Frac Tech	ADIC, KIC, Temasek, RRJ Capital	USA	Petroleum and Natural Gas	2011
Gassled	ADIA, CPP Investment Board, Allianz	Canada	Petroleum and Natural Gas	2011
Helioscentris Energy Solutions	KIA, Life Energy	Germany	Energy	2011
Huaneng Renewables	CIC, Temasek, GE	China	Energy	2011
Osum Oil Sands Corp.	KIC, GIC, KERN Partners, Warburg Pincus, Blackstone Partners, Camcor Partrners	Canada	Petroleum and Natural Gas	2011
SolarEdge	Temasek, Norvest Venture Partners, GE, Opus Capital, Walden International, Genesis Partners, Lightspeed Venture Partners	Israel	Energy	2011
Chesapeake Energy Corp.	CIC, KIC, Temasek, ADIC, Blackrock, Hopu Investment	USA	Petroleum and Natural Gas	2010
Laricina Energy Ltd	KIC, CPPIB	Canada	Petroleum and Natural Gas	2010
SouthGobi Energy Resources Ltd	CIC, Temasek	Canada	Petroleum and Natural Gas	2010
China Gas Holdings Ltd	Temasek, Oman	Hong Kong	Petroleum and Natural Gas	2005

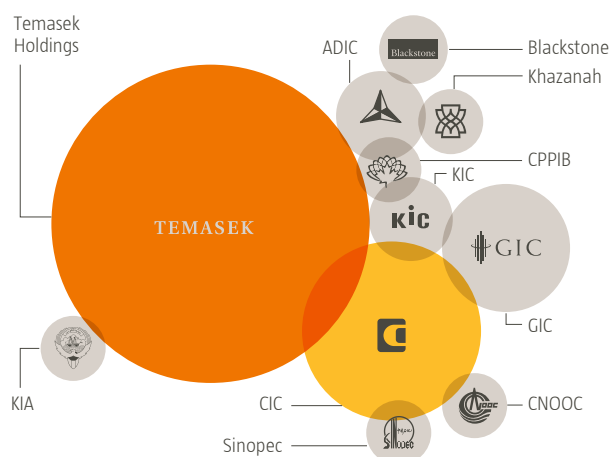
Sources: Fletcher SWF Database, Capital IQ



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Chart 5 illustrates the significant concentration of direct energy investments through nested consortia primarily clustered around Temasek and CIC. When analyzed in conjunction with Table 1, the alliance patterns reveal significant SWF partnering between and among: 1) other SWFs; 2) private equity general partnerships, e.g. Hopu Investments, RRJ Capital; 3) large national and provincial pension funds, e.g. Canada Pension Plan Investment Board (CPPIB), 4) divisions of independent private sector corporates, e.g. GE Energy; 5) state-owned enterprises, e.g. CNOOC and Sinopec; and 6) portfolio companies, e.g. BTG Pactual, Blackstone.

**Chart 5**  
Selected SWF-Centric Co-investment Clustering 2010-2012



Source: The Fletcher SWF Transaction Database (2013)

Beyond simply co-investment per se, the investment patterns and structures of strategic partnering that emerge from these transactions suggest a robust foundation that is capable of supporting the mobilization of large-scale investment in global energy. For example, while the selected transactions are largely concentrated in the resources sector in North America, they also suggest the potential to partner across regions and energy subsectors.

Deal structures are diverse and include not only investments in public companies, IPOs, and private projects, but also greenfield deals. Deal-specific participation too is flexible and may include various combinations of SWFs, PE funds, and other institutional investors. Notable examples of well-publicized public deals include Chesapeake Energy and Cheniere Energy, both US publically-listed companies in natural gas and related subsectors. Both deals involved wide participation by SWFs. The former, concluded in 2010, included ADIC, CIC, KIC, and Temasek, in

addition to PE investors Blackstone and Hopu Investments, as well as Franklin Templeton. Cheniere was co-invested in 2012 by CIC, GIC, and once again Blackstone - a CIC portfolio company, it is important to note. With respect to greenfield investing, GIC also partnered with GE Energy Financial Services and Arclight Capital, an energy-focused private equity firm, to consolidate five Georgia natural gas-fired power plants to form the largest independent power producer in the southeastern US<sup>22</sup>.

While all deals involve financial investment at their core, many are accompanied or followed by production, operating, or supply arrangements by affiliates of the investors, whether state-owned enterprises or divisional counterparts (as in the case of GE noted above). We focus here on two noted examples involving CIC either directly or indirectly in partnership with Chinese state-owned oil companies Sinopec and CNOOC. In 2012, CIC joined Sinopec and China Life Insurance to participate in the Hongkong IPO of Canadian-based Sunshine Oilsands. Sinopec had previously signed an agreement to develop a joint venture with the company and has been exploring ways to accelerate exploration and production<sup>23</sup>. CNOOC, an investor in BG Group's LNG project in Australia, recently announced a 20-year gas purchase agreement with the company. It is believed that both CIC and SAFE Investments independently hold stakes in BG.

Deal sponsorship and leadership also vary as a function of the interests and expertise of the investing parties. For example, Temasek, with considerable experience and substantial leadership in the sector, will participate in deals organized by others. Here it is interesting to point out the active leadership of a private investor group, with ties to Temasek, in organizing and structuring large-scale energy deals particularly involving Asia SWFs. RRJ Capital, led by brothers Richard and Charles Ong, is a Hong Kong-based private equity fund focused on China and Southeast Asia. Richard Ong was founder and CEO of Hopu Investments, which was instrumental in structuring the 2010 private transaction to fund Chesapeake Energy previously noted. Charles Ong, prior to joining RRJ, spent 10 years at Temasek, holding several executive positions including Chief Investment Officer and Chief Strategy Officer. Since forming RRJ, the Ong's have participated in the Cheniere deal also noted earlier and as well have played a lead role in organizing a USD 3.5B investment for a 70% stake in Frac Tech, which provides hydraulic fracking services. The deal included KIC and CPPIB, in addition to RRJ and Temasek<sup>24</sup>. The remaining 30% of Frac Tech –interestingly– is held by Chesapeake Energy.

<sup>22</sup> <http://www.arclightcapital.com/News/Press-Releases-Articles/ARCLIGHT-TEAMS-WITH-GE-AND-SINGAPORE-S-GIC-TO-FORM.aspx>.

<sup>23</sup> "Sunshine Oilsands Favors a Venture With Sinopec to Tap Oil Sands", *Bloomberg*, 16 Aug 2012.

<sup>24</sup> "Frac Tech Got \$3.5 Billion", *The Wall Street Journal*, 13 May 2011.

Finally, as in any private equity transaction, post investment monitoring is critical to insure effective review and governance. Once again monitoring structures vary from full board participation to more passively oriented arrangements. Because of de facto government involvement in any transaction involving SWFs and due to the sensitive nature of these affiliations, particularly in cases potentially involving national security, governance structures may take the form of indirect or delegated monitoring. An interesting case in this regard is CIC's participation in Cheniere. In this transaction CIC co-invested with portfolio company, Blackstone, among others. Blackstone was awarded board seats. CIC, for its part, deflected political pressure, by assuming a passive posture concerning governance. It does not sit on the Cheniere board, but rather monitors and influence indirectly in part through Blackstone<sup>25</sup>.

### Parting Thoughts

SWF investment in global energy is aligned with the current and emerging strategic energy imperatives of fund host countries. Direct investment in the sector is highly concentrated among the largest funds in major energy consumer and producer countries. The enormous scale of future investment to develop the energy sector requires the mobilization of both public and private resources—both real and financial—to meet the global challenges of universal energy access. SWFs, among the largest institutional investors globally, are well suited to lead investment in the sector because of their scale, long-term effective investment horizon, and ability to mobilize political resources to facilitate the operational extension of investment programs and to mitigate political risk. For these and other reasons they are also sought-after investment partners and co-investors.

SWFs have embraced the opportunities presented by structural shifts in global energy sourcing and have actively partnered with each other, other large global institutional investors, private equity funds, state-owned and government-linked corporations, and portfolio companies to scale deals, mitigate risks, but also to contribute meaningfully to other components of their host countries' strategic energy agenda particularly with respect to diversification. The pace of SWF investment in the sector has accelerated since 2008 and refocused in line with the technological and production advances in new energy sources. The success of strategic investment partnerships and other forms of co-investment will enhance deal flow among key investors. As SWF assets and capacity continue to expand and the number and size of in-house direct investment programs grow<sup>26</sup>, sovereign capital flows into global energy will continue on their current trajectory, if not accelerate further over the near horizon.

<sup>25</sup> "China Fund Invests in US Gas Export Plant", *Financial Times*, 21 August 2012.

<sup>26</sup> SWFs stand to benefit from significant cost savings by switching to insourcing private equity. Savings attributable to in-house programs have been estimated to be nearly 150 basis points (25 bp vs 165 bp for externally-managed programs). See "Insourcing' trend growing among big institutional investors", *Pensions & Investments*, May 13, 2013 accessed at <http://www.pionline.com>.