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Clean technology moves into the mainstream

INSIGHTS

Clean technology private equity funds are increasingly being considered by investors worldwide, as government stimulus packages, corporate and household initiatives drive growth in the space.

Clean technology funds are a growth sector, providing specialist access to companies involved with technology. Major areas of focus include renewable power, energy efficiency and environmental services.

In terms of current activity, government stimulus packages across the globe have specifically targeted funding towards clean technology initiatives. At the same time government policy is trending in its support for these initiatives, but formalisation of more carbon markets beyond Europe, in the wake of Copenhagen, will certainly assist some proposed business models.

The focus on clean technology private equity is also increasingly topical with institutional investors. This has been supported by a growing pool of funds (particularly in listed shares) with a track record of taking environmental, social and governance issues into account, together with many funds signing up to the United Nations Principles for Responsible Investment

To date, and particularly in listed markets, the clean technology theme is still most evident in global markets. While there are some larger leading Australian companies in select sectors (eg waste and recycling), we are still yet to establish a broad clean technology industry with significant investment depth.

Here we analyse three key factors that are likely to shape the clean technology sector going forward.

Trends in the emergence of new funds

Investment in the clean technology space differs across key investment strategies and financing type.

Private equity represents a relatively small component of all investment in the clean technology space, and pure clean technology private equity funds investments an even smaller allocation. As it stands private equity makes up less than 20%

of capital allocated to the clean technology theme, with over 70% of capital going towards renewable power infrastructure.

Then within the private equity space the investment may be via a range of entities, with only a proportion by specialist clean technology private equity vehicles. Increasingly generalist private equity firms are involved in the space, with clean technology investment growing from under 1% to nearly 15% of global venture capital in the last decade. Traditional venture capital firms are simply finding there are not enough software companies to prop up their traditional model.

Data released for 2009 is supportive of this premise, with about a quarter of all global venture investment capital invested in clean technology in 2009, more than any other category - including software and biotech. Further, while the absolute level of clean technology investment (at \$5.6 billion) declined in 2009, it only retraced to 2007 levels. In contrast the broader private equity market fell to 2003 levels¹.

It should be noted though that the skill set for clean technology can involve differing expertise in power, utilities, resources and operations which is distinct from traditional IT. This is providing a pathway for specialist providers and has also meant a need to extend the skills of traditional venture firms.

Themes within clean technology

Within the clean technology market it is useful to consider the types of themes which are being tapped into by managers and which are providing competitive returns.

Sectors can be broadly defined as follows:

Renewable power generation

- Wind
- Solar
- Biomass and waste
- Hydro
- Geothermal

Distributed power and storage

- Biofuels and catalysts
- Advanced batteries and fuel cells
- Electric vehicles and components

Energy efficiency

- Smart grid
- Lighting
- Advanced Metering
- Green building
- IT/software

Environmental

- Pollution mitigation
- Water treatment and technologies
- recycling services
- Carbon capture and trading

Source: Stepstone Group LLC

These themes fit with the categories of funds emerging, with private equity focused on distributed power and storage, energy

¹ The Cleantech Group, June 2010

efficiency and environmental. At the same time infrastructure related raisings focus on renewable power generation.

Without doubt the majority of raisings have been on a global platform. From an Australian context, there has been a lack of specialist private equity providers in the clean technology space locally, in part reflecting the smaller market size for energy efficiency, environmental and distributed power and storage products. And as at 31 December 2009 in Australia's S&P/ASX 200 there are only three companies that fit within the clean technology theme.

The renewable power infrastructure offerings in Australia have also been small in number. However, there are a couple of areas in the Australian market which are having some success and have attracted global capital via venture capital and interest: residential solar, sustainable forestry strategies, waste/recycling and environmental property initiatives. These strategies fit well with the government mandated support for solar, and Australia's global leadership on sustainable property as recognised in many international ratings studies.

How are clean technology funds performing?

There is a shortage of data on the performance of clean technology funds, as many clean technology funds have not yet been invested for their full time period, with many unrealised investments still within the funds.

However, based on those transactions that did occur battery makers, selected solar and energy efficiency all had some strong successes in recent years. It is interesting to note the particular success in Asia, with a number of large Chinese clean technology companies being listed in Hong Kong (three of the top five globally by market capitalisation in 2009)².

From a listed market perspective, sub-themes of environmental services, efficiency and water management have been consistent performers over the short and longer term, while clean energy and to some extent sustainable transport have been more volatile³. It is useful to consider drivers of returns of the clean technology sector going forward:

- Solar power is very dependent on government subsidies and will remain so until grid parity is reached in major markets. Currently Germany accounts for 60% of the global market, and the world market is heavily impacted by the changes to the German feed in tariff. Price is also critical, which has seen China emerge as dominant player.
- Wind power is dependent on power purchase agreements, renewable obligations and the availability of finance. While ongoing renewable obligations are supportive, delay of emissions trading schemes is a negative.
- Finite commodities with growing population and urbanisation provide a platform for both the water sector, and energy based solutions which are an alternative to oil. Both these solutions are not as government policy dependent. Energy prices have proven a very powerful stimulant of alternative choices - batteries for electric cars are an example of an area of strong current interest.
- The corporate race to be green – globally corporates are focused on their green credentials, to attract clients and motivate staff as well as drive cost savings. This is a long term trend with considerable momentum. In Australia in particular the green building sector has been supporting many innovative new technologies towards reducing energy and water costs and attracting tenants.
- Consumer demand - regardless of political sentiment there remains a core of consumers that are looking at environmentally smarter products, with studies pointing toward the robustness of the consumer on green issues even in an economic downturn.

Conclusion

As a result of our market analysis, AMP Capital recently added the first clean technology private equity fund into our Responsible Investment Leaders Balanced Fund. In our view, investment in clean technology will continue to gather pace and we will continue to look for investment opportunities in this alternative investment space.

² The Cleantech Group, June 2010

³ Based on returns of key clean technology themes held within the Henderson Global Investors industries of the future portfolio over one and five years to 31 Dec 2009.

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