

## EMV EIS Fund I

### EcoMachines Ventures Ltd / Sapphire Capital Partners LLP

#### Summary

The fund's investment strategy is to invest in a portfolio of EIS qualifying technology companies, with a focus on B2B businesses built on innovation in energy & energy efficiency, industrial high-technology, resource efficiency, smart cities and connected transport.

	Positives	Issues
<b>Why Invest</b>	<b>Strategy:</b> Exposure to a portfolio of technology companies that focus on hardware and hardware-enabling software and applications.	<b>Past performance:</b> The fund is new and has no past performance, though we note that the team has one exit from other investments.
<b>The Investment Advisor</b>	<b>Team:</b> The EMV team has significant experience of building new businesses and making Angel / Venture Capital investments.	<b>Track record:</b> Although EMV has been making venture capital investments since 2014, this is their first EIS fund.

#### Nuts & Bolts

- ▶ **Offer period:** The first closing date will be 30 March 2018, or at manager discretion.
- ▶ **Diversification:** The aim is to invest in 6-8 companies.
- ▶ **Valuation:** There will be little or no change in the valuation except at further fundings, and investors will receive regular updates on progress.

#### Specific Issues

- ▶ **Fees:** Mixture of direct fees and charged via the investee companies.
- ▶ **Performance fee:** Tiered: 20% on gains between £1.10 and £3 for each £1 invested on a per company basis. Above this, the fee is 30% of the investor share of the return.

Advisor information		Risks
Scheme assets	£0m	<ul style="list-style-type: none"> <li>▶ <b>Target returns:</b> The target return of tripling invested capital over 6-8 years suggests a higher risk strategy within the EIS area and is appropriate for the strategy, though investors should note the slightly longer term than some other funds target.</li> <li>▶ <b>Companies:</b> Individual investments will be high risk, with the return profile likely to be skewed. Those that do well will give a larger than target return but the failures may return little or nothing.</li> </ul>
Scheme target	£10m	
EIS assets	£0m	
Total FUM	£13m	
Fund launch date	2017	

#### Analyst

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## Table of Contents

<b>Factsheet</b> .....	<b>3</b>
<b>Fund Aims</b> .....	<b>4</b>
Summary of Risk Areas.....	4
Risk Analysis / Commentary.....	5
<b>Investment Process</b> .....	<b>6</b>
Governance and Post-Investment Monitoring.....	9
Track Record.....	10
Fees .....	10
<b>Fund Operator and Advisor</b> .....	<b>12</b>
<b>Appendix 1 – Due Diligence Summary</b> .....	<b>13</b>
<b>Appendix 2 – Example Fee Calculations</b> .....	<b>14</b>
<b>Disclaimer</b> .....	<b>15</b>
<b>Hardman Team</b> .....	<b>16</b>

## Factsheet

EMV EIS Fund I		
Product name	EMV EIS Fund I	
Product manager	Sapphire Capital Partners LLP	
Investment Adviser	EcoMachines Ventures Limited	
Tax eligibility	EIS	
Target return	£3 for every £1 invested after 6-8 years	
Target income	None	
Type of product	Discretionary portfolio service	
Term	6-8 years	
Sectors	Technology	
<b>Diversification:</b>		
Number of companies	6-8	
(Expected) Gini coefficient	0.125-0.167	
Fees	Amount	Paid by
<b>Initial fees:</b>		
Entry fee	0.75% (excl VAT)	Investor
Initial fee	3.0%-5.0% (excl VAT)	Investee company
<b>Annual fees:</b>		
Management Fee	1.05% (excl VAT) per year for 5 years	Investor – see report for details
Annual fee	1.0%-2.0% (excl VAT) per year for first 3 years	Investee company
<b>Exit fees:</b>		
Performance fee	20%	Investor share of proceeds between £1.10 and £3.00 per £1.00 invested on a per company basis
	30%	Investor share of proceeds above £3.00 per £1.00 invested on a per company basis
Advisor fee facilitation	Yes	
Advisor fee amounts	As agreed with investor	
HMRC Approved fund?	No	
Advance Assurance from HMRC	Yes	
Reporting	Quarterly	
Minimum investment	£25,000	
Current funds raised	£0m	
Fundraising target	£10m in current financial year	
Closing date(s)	30 March 2018, or at Manager's discretion	
Expected exit method	IPO, trade sale, secondary sale or other exit opportunity	

Source: Sapphire Capital Partners LLP, Hardman & Co research

## Fund Aims

EMV EIS Fund I is a discretionary portfolio service which will invest in 6-8 technology companies. The target return is a return of £3 for each £1 invested. Returns will be focussed on capital gains and investors are unlikely to receive any dividends. The aim is for the fund to invest in the 2018/19 tax year.

There are two groups that have a role in managing the fund:

- ▶ **Investment Manager:** Sapphire Capital Partners LLP, who do fund management and compliance.
- ▶ **Investment Advisor:** EcoMachines Ventures Limited (EMV) who source and manage the projects.

## Summary of Risk Areas

*Note: There are generic risks from investing in EIS or unquoted companies in addition to the specific ones commented on below. Comments on relative risk refer to other EIS investments and not to wider investments.*

### Investments

#### *Portfolio Risk*

Each investment will be into a technology company. The target is for investors to receive shares in 6-8 companies. The focus means that there will be limited sector diversification, but each investment will be expected to perform independently of the others.

The target return of 3x return over 6-8 years suggests a higher risk strategy.

#### *Sourcing and External Oversight*

Sourcing will take place through a combination of direct approaches and the infrastructure and network which EMV has built up. Notably this includes major corporates, some of whom EMV has co-invested with previously and is now getting referrals from.

#### *Ongoing Support and Monitoring*

EMV looks to put in place an accelerator type plan for each company, looking to determine the areas that the investee company needs support in. There is a particular push towards good financial controls and internationalisation of sales. EMV hopes to take an on-going role in providing follow-on funding for the companies that require it.

Each investee company will have a director representing the fund and with a regular flow of management information to EMV.

#### *Exits*

The intention is that exits will come through trade sales or other normal exit routes such as IPOs.

## Manager / Advisor

### *Team*

EMV has been making venture capital investments since 2014. The team is adequate to manage the fund, with the senior members of the team having significant experience in building businesses, managing investments and corporate finance.

### *Track Record*

As a new fund, EMV EIS Fund I does not have any track record, though the management team behind it are experienced in the technology sector. EMV has facilitated six non-EIS venture capital investments to date with one exit (though some rounds in two companies were alongside EIS investors).

## Regulation

### *Product*

Advance Assurance will be sought from HMRC for each company investment.

### *Manager*

The Fund Operator of the Fund is Sapphire Capital Partners LLP. It is FCA registered (number 565716) with fund management permissions. Submissions to Companies House appear to be up to date.

EcoMachines Ventures Limited is FCA registered (number 718907) as an appointed representative.

## Risk Analysis / Commentary

Although the Fund is new in the EIS space, the principals bring experience of both building new businesses and venture capital investing. The track record of EMV shows an ability to raise and deploy capital, though there have only been a small number of investments to date and these were not EIS-eligible. They do appear to have a well constructed investment process, with some features that are comparable to much more established managers. They also have shown an ability to work with/alongside large corporates which could supply additional technology validation, support or finance options.

The focus on hardware and hardware enabling-software is slightly unusual and does bring some distinct characteristics. In particular, there may be more need for follow-on investments and a longer time to maturity than some other technology investments. However, this may bring some diversification benefits to an investor who already has exposure to other technology areas.

As is usual in this industry, expected returns will be skewed with only a proportion of companies doing very well. It is likely that there will be some complete failures to offset the successes. Individual investments, as is normal in the technology area, may be high risk.

The expected diversification within the product may be limited. Individual investments should perform independently of each other though. Investors should consider this product in the context of their whole portfolio.

## Investment Process

### Deeper dig into process

The EMV EIS Fund 1 will look to invest in technology companies focussed on several sectors. The sectors of interest are clearly set out in the Information Memorandum and are:

- ▶ Energy and energy efficiency;
- ▶ Industrial technology;
- ▶ Resource efficiency and the circular economy;
- ▶ Smart cities and connected transport.

Within these sectors EMV has preferences for certain technology areas: robotics, AI, power electronics and controls, internet of things, material science and industrial chemistry and advanced engineering. EMV highlights that it is interested in hardware or hardware enabling software. This is different from many technology EIS funds, and in particular it will not invest in pure software.

This has a couple of consequences for investors. Firstly, future capital requirements may be larger than some other sectors and follow-on fundraisings are more likely to be required, with potential dilution if investors are unable to join in. EMV look to mitigate this in the investments they choose, but most successful investments will require follow-ons. Secondly, the time required to maturity is potentially longer than some other investments, with EMV guiding 6-8 years.

The hardware and hardware enabling software focus also means that investee companies will be more focussed on business markets than consumer ones. EMV wants to see an identifiable market with substantial commercial potential. It also wants demonstrable interest from a large corporate, whether as potential customer or partner/investor.

EMV also places importance on the management team, with an emphasis on making sure they have the relevant expertise and experience. They are also looking for a willingness to work with and take advice from the Investment Advisor – post-investment support is important and management who can't accept advice will not be suitable.

### *Sourcing Deals*

It is anticipated that deals will come from a mixture of direct applications and through the network that EMV has built up over the last three years. When EMV first opened its doors there were a lot of direct approaches, most of which were pretty low quality. As they have developed their capacity they have made connections that have led to much higher quality referrals.

The range of the network has much in common with many other VC firms, and includes Universities, accelerators and friendly VC firms. One source which gets greater emphasis by EMV is corporate referrals. In several of the deals they have done to date they have co-invested alongside large companies, including ABB, Mitsubishi, Philips Lighting and Evonik Industries. Some of these are now referring possible investments to EMV, sometimes with the potential for co-investing. Interestingly, they are also receiving referrals from corporates who they have not

worked actively with yet, suggesting they are getting a good reputation in these circles.

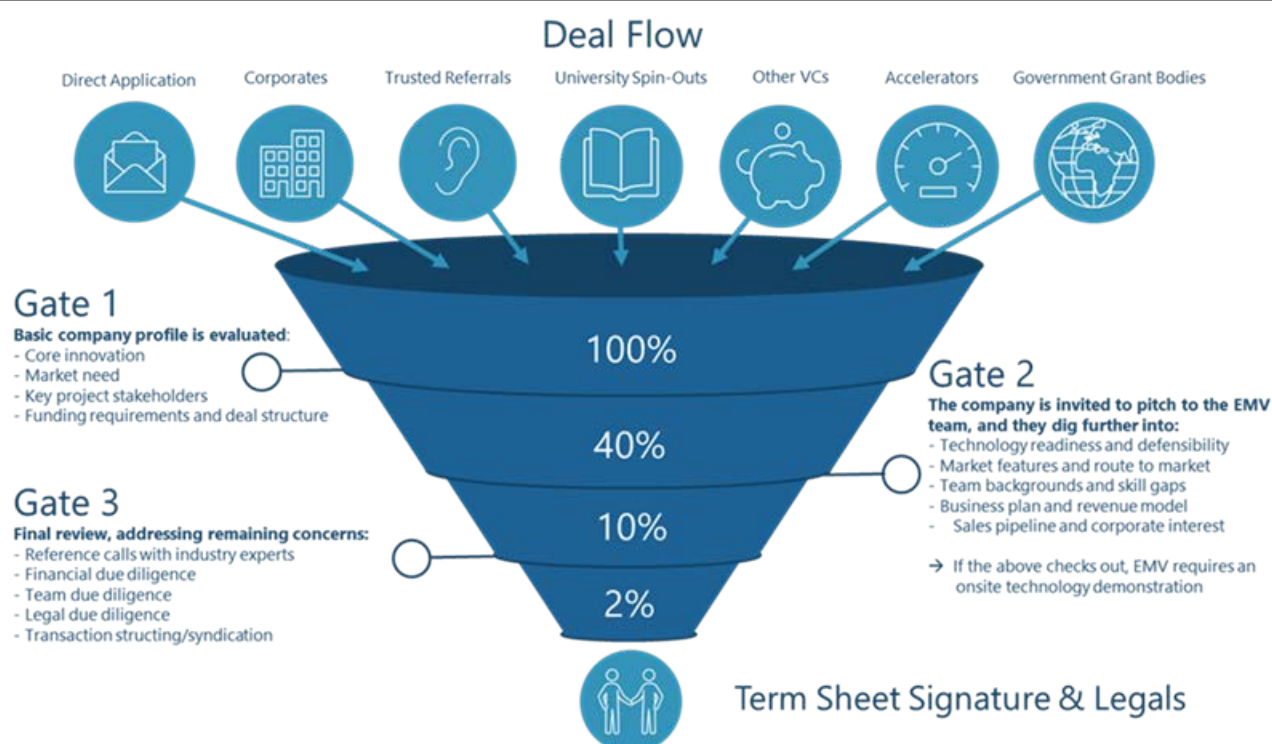
As well as the EIS Fund, EMV will continue to source deals for their existing network of investors. Hardman & Co understand that the Fund will get priority on any potential investments, though there may be the possibility of co-investing. Where potential investments are not EIS eligible clearly no conflict will arise.

Overall, EMV looked at over 260 potential investments over the year to May 2017. Given their estimated acceptance rates, they should be able to source the 6-8 investments targeted for the fund.

### Decision Making

EMV have produced a diagram summarising their decision making process, shown below.

#### Summary of decision making process



Source: EcoMachines Ventures

The first stage is an initial assessment by a junior member of the team. At this stage they focus on four issues: what the company does and what innovation is there; how they will do it and what the business model is; who the key stakeholders are, including any corporate support; and the broad financials such as how much is being raised and what is the valuation. At this point a short document is considered by the Investment Committee.

The second stage is a longer process, and may have some mini-gates within it. The stage starts with a structured conversation with the company management. To avoid this consuming too much resource, normally a template is used for asking questions with the aim of keeping the conversation short. This will include a principal as well as the junior member of the team.

Assuming the conversation is satisfactory, then EMV starts to examine supporting documents. As the diagram indicates, this covers areas such as the technology, any IP surrounding that, the potential market, company finances and staffing. At this stage a third party reference will be taken on the technology.

This stage will involve the completion of EMV's Score Card. This is a structured rating process. Over 50 items are scored on a mixture of subjective and objective measures, with comments added where necessary. These are grouped into seven categories which allows an easy (visual) summary of the broad stages of development of the company.

EMV stress that decisions are not based solely on these scores. They believe that helps to keep their views objective and avoid 'falling in love' with a company. It is a well structured part of their process, and better than what many larger companies have produced.

The Score Card is also a helpful part of their process when an investment does not immediately move on through the 'Gate'. EMV keeps in touch with several companies that they believe could eventually be suitable for investment, but not at the time of first contact. The Score Card allows them to monitor progress in a structured way.

Assuming these investigations are satisfactory, EMV then requires an on-site validation of the technology. This may be by a member of the team, or may involve a specialist where a more technical (typically less visual) assessment is required. This will be followed by a draft term sheet – it is important to get a broad agreement on this before progressing to the third stage.

The third stage is primarily one of due diligence: legal and financial checks are made and references are taken, both on the team and further ones on the technology. The Fund Manager, Sapphire, is involved at this stage. The decision to invest is taken by the Investment Committee, with a majority decision required.

The historical final selection rate of 2% is in line with many others in the industry. EMV note that recently this rate has improved, probably to the improved referrals they are getting from their network. This higher rate will need to be maintained for them to hit their target number of investments.

As indicated in the sources above, EMV is keen to co-invest with other parties, particularly industry sources. They see an advantage in their ability to bring stronger technology assessment capabilities, supply a possible route to market and potentially provide options for further funding or exits. In the deals they have done to date with industry partners, the latter have been happy to have a financially orientated partner. This is validated by the supply of potential deals that these industrial partners are now directing to EMV.

It is expected that investments will be between £200,000 and £1m, for which investors will typically get a 15-25% stake.

The aim is to give investor exposure to at least six companies. Whether this number is exceeded will be affected by the size of the fundraising and the needs of the companies. There will be no specific diversification by sector as this will be a function of the opportunities that arise, though given the nature of the projects each should perform independently of the other.



## Governance and Post-Investment Monitoring

Advance assurance will be received from HMRC on all investments prior to committing funds.

All client assets, including cash and shares, are held by the Custodian, Mainspring Fund Services. Mainspring will also carry out the fund administration and use an online portal to supply client documentation.

Investors will receive reports on their investments quarterly, with an annual review that will give more detail. As unquoted investments, we would not expect there to be significant changes in share values unless there is a follow-on investment.

The fund will expect to have a board position on each investee company. This role will most likely be taken by one of Ecomachine's senior executives, a Venture Partner or from their network.

EMV look to play an active role in supporting investee companies after investment. The starting point for this is what they describe as an accelerator type plan. This tailored to each company, looking to the specific areas that a company needs help with.

The most common requirement for existing investments has been help with talent identification. This is usually for senior roles, including non-executives, and sales. EMV expects this to be similar going forward as most companies will not be well developed and at the early stages of commercialisation.

One area of support that EMV tends to push for is the right capability in financial reporting. This may include ensuring that a CFO or financial controller is appointed. EMV also encourages early internationalisation of markets.

Other areas of support include connecting the company within the relevant industry, helping with a review of the company IP and what is required to protect that (a particular strength of the EMV team). For early stage companies support will also include preparation for the next funding round.

It is anticipated that the support required will broadly decrease over time. EMV cite Qbot, an existing investment where the intensity of support is lower than it was originally. This is also reflected in the fees payable by the investee company, which may cease after three years (though exact timing may vary on a company by company basis).

EMV expect an EIS funding round to finance a company for around 18-24 months. While ideally this will take the investee company to being self funding, the areas that the fund will invest in mean that it is expected that some of the investee companies will have greater follow-on funding requirements than those in some other EIS funds. The expectation is that existing investors will be given the opportunity to participate in any follow-ons. These, of course, may or may not be EIS eligible. EMV hope to be able to take a leading role in sourcing follow-on funding, but there is no guarantee that they will be able to do so. Investors may be diluted if they do not participate in these follow-ons.

### Exits

Most exits are expected to occur through trade sales, though other options, including flotations and secondary sales to other financial investors, are not ruled out if appropriate.

EMV management would like to be able to provide an earlier exit option by facilitating secondary sales as part of follow-on funding rounds where they are sourcing the funding. Hardman & Co note that, although positive, this is currently aspirational rather than established. If this happens investors should note that there is likely to take place on a matched bargain basis and they may wish to have any transaction price independently validated.

## Track Record

The fund is a new venture and does not have any past performance. EMV has deployed £12.8m into six investments since April 2014, all funded from non-EIS money. Unlike EIS investments the funds were deployed into a mixture of equity and convertibles with a small amount of debt.

To date one of the investments (the smallest) has exited at a gross 1.57x multiple (1.41x net of fees) over 2 years. Some of the remaining portfolio have seen follow-on investments, and the valuation using the most recent prices is showing a 17% uplift on cost (though we note that there are exchange rate effects too). There have been no failures yet.

Overall the track record is very limited. Although the figures to date look promising, EIS investors will not be able to place any real reliance on them yet.

## Fees

The fees for the Fund are set out in the table on page 3 and are a mixture of payable directly by the investor and by the investee companies. These are straightforward, other than as noted below:

- ▶ **Management Fee:** The first three years of this will be deducted from the initial payment, with subsequent payments drawn from exit returns on a deal-by-deal basis, subject to a return of at least £1.10 per £1 invested. The fee is only payable for the first five years.
- ▶ **Fee variability:** Although there is not a fixed fee, the intention is that fees broadly reflect the effort required. Where different rates are given, it should be expected that smaller investments will pay a higher fee rate and vice versa.
- ▶ **Performance fee:** This tiered, with a 20% rate payable on gains between £1.10 and £3 for each £1 invested and 30% rate for gains over £3. This is calculated on a per company basis. This structure may lead to performance fees being paid when the fund as a whole has not outperformed.
- ▶ **Other costs:** These are for when costs go beyond those normally expected e.g. extra testing equipment for diligence, substantial supporting/monitoring expenses such as travel.

The fees and charges are quoted net of VAT. Where investee companies have sufficient VATable revenue, the VAT can be offset, but where a project is unsuccessful that may not be the case.

### **Fundraising targets**

The minimum size of the fund will be £2m, with a closing date of 30 March 2018, extendable at the Manager's discretion, and a maximum fund size of £10m. The number of investee companies is not very dependent on the amount raised.

The minimum subscription is £20,000 per investor.

## Fund Operator and Advisor

Sapphire Capital Partners LLP is a fund manager within the Tax Enhanced services market. It provides a wide range of specific Tax Enhanced services. We note that the two partners have each won EISA best individual rising star in 2015 and 2016.

EcoMachines Ventures Limited is a UK based company that has been investing in technology companies since 2014. To date it has mostly sourced funds through family wealth offices and this is its first EIS fund.

### People

#### *Dr Ilian Iliev – Co-founder & MD, EcoMachines Ventures Limited*

A serial entrepreneur, he founded a business operating in the industrial power electric space in South Africa in 1997. He followed this working as strategy consultant and was a Board Advisor to Allen & Overy. In 2006 he co-founded CambridgeIP Ltd, which was sold to a major West Coast player in IP.

#### *Dr Oleg Evdokimenko – Co-founder & Non-Executive Chairman, EcoMachines Ventures Limited*

An industrialist and angel investor, he has been a research associate at the Russian Academy of Sciences since 1994. He is a board member of several metallurgical, financial and technology companies in Russia and US, and Chairman of Nanotech Industrial Solutions.

#### *Chris Niehaus – Director*

Since 1999 has followed a career in investment banking, holding senior roles at ING and HSBC in South Africa followed by 11 years at UBS, including as Head of M&A Industrials. Most recently he was Head of EMEA Industrials at Jefferies.

#### *Ian Cooke – Venture Partner*

Has worked in venture capital and business development in the engineering and environmental sectors, covering a variety of emerging markets in Asia & Africa. A former Director at the Carbon Trust, where he led its investment programme, he has also founded several new ventures.

#### *Boyd Carson – Founder & Managing Partner, Sapphire Capital Partners LLP*

Previously worked as a Director of PwC LLP corporate finance in New York. Boyd is a Fellow of the Institute of Chartered Accountants. He also acts as a director for several companies in the UK and is the honorary treasurer of a leading cancer charity.

#### *Vasiliki Carson - Partner, Sapphire Capital Partners LLP*

Having started her career at JP Morgan Chase, Vasiliki moved to PwC LLP before joining Goldman Sachs, where she worked in both New York and Tokyo. She returned to PwC corporate finance until she left to become a partner in Sapphire Capital. She is a qualified accountant.

The Investment Committee comprises of Dr Ilian Iliev, Dr Oleg Evdokimenko, Chris Niehaus and Ian Cooke. The latter two are not employees of EMV, but will get carry in investments on which they work.

## Appendix 1 – Due Diligence Summary

Summary of core due diligence questions			
Investment Manager			Validated by
Company	Sapphire Capital Partners LLP		
Founded	2009		Hardman & Co
Type	Limited Liability Partnership		Hardman & Co
Ownership	Two LLP Designated Members		Hardman & Co
FCA Registration	565716		Hardman & Co
Solvency	Yes		Sapphire
EISA member	Yes		Hardman & Co
Investment Advisor			
Company	EcoMachines Ventures Limited	Information Memorandum	
Founded	2013		Hardman & Co
Type	Private Limited Company		Hardman & Co
Ownership <sup>1</sup>	Dr Ilian Iliev (30% B shares), Dr Oleg Evdokimenko (37.3% A shares), Excursion Ltd (Seychelles– 32.3% A shares)		Hardman & Co
CRN	08357617		Hardman & Co
FCA Registration	718907		Hardman & Co
Solvency	No		Hardman & Co
EISA Member	Yes		Hardman & Co
Fund Custodian			
Company	Mainspring Nominees Limited	Information Memorandum	
FCA Registration	591814		Hardman & Co

Source: Hardman & Co research

### Regulation

The fund manager is Sapphire Capital Partners LLP. It has two LLP Designated Members: Mr Boyd Carson and Mrs Vasiliki Carson. It was created in 2009 and has its accounts made up to 31 December 2016. The company has confirmed its solvency and has appropriate investment management permissions from the FCA.

EcoMachines Ventures Limited was known as EcoMachines Incubator Limited until July 2015. It has accounts filed up to 30 December 2016 and other submissions to Companies House appear to be up to date. Its FCA registration is as an appointed representative.

<sup>1</sup> At the time of writing this is a slight change from what is filed at Companies House, where we understand the update will appear soon.

## Appendix 2 – Example Fee Calculations

This calculates the estimated amounts payable both directly and indirectly under certain assumptions.

### Basic Assumptions

Term	5 years
Investor amount	£100,000
Company investment	£500,000
VAT is reclaimable by investee companies.	

*Source: Hardman & Co research. Five years used for consistency with other reports.*

### Calculations

		Hardman & Co Standard			Target
Gross Return		-50%	0%	50%	119%
Amount (pre-tax relief)		£100,000	£100,000	£100,000	£100,000
<b>Initial Fees</b>	<b>Rate</b>				
Entry fee	0.75% (excl VAT)	£900	£900	£900	£900
Management fee (three years deducted)	1.05% (excl VAT)	£3,780	£3,780	£3,780	£3,780
<b>Total</b>		£4,680	£4,680	£4,680	£4,680
<b>Net investment</b>		£96,220	£96,220	£96,220	£96,220
<b>Company charges</b>					
<b>From company</b>					
Initial fee	4.0%	£3,849	£3,849	£3,849	£3,849
Annual fee	1.5%	£1,443	£1,443	£1,443	£1,443
<b>Total over 5 years</b>		£8,179	£8,179	£8,179	£8,179
<b>Gross fund after investment return</b>		£48,110	£96,220	£144,330	£210,722
<b>Exit fees</b>					
Management fee (years 4 and 5)	1.05% (excl VAT)	£0	£0	£2,520	£2,520
Performance	20% above £1.10	£0	£0	£6,866	£20,144
	30% above £3.00	£0	£0	£0	£0
Net amount to investor		£48,110	£96,220	£134,944	£188,057
Gain (pre tax relief)		-£51,890	-£3,780	£34,944	£88,057
Gain (post tax relief)		-£23,024	£25,086	£63,810	£116,923
Total fees paid		£12,859	£12,859	£22,245	£35,523

*Source: Hardman & Co research*

*Note: fund target has been reduced pro-rata for shorter term than target, for variable fees the midpoint has been assumed.*

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*(Disclaimer Version 2 – Effective from May 2017)*

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