

# Company analysis

Cleantech Invest

26.1.2017

# Cleantech Invest



## Recent developments in Cleantech Invest and the portfolio companies

### Recent development

- News flow from Cleantech Invest (“CTI”) portfolio companies has been active and key developments are highlighted below.
- Nocart announced a very significant deal for delivery of solar hybrid power plant to Zambia with value of \$200 million. The 30-40MW power plant is for the first part of a 100MW sugarcane plantation power plant. Furthermore, Nocart raised €5 million in December including an investment from CTI with a special purpose vehicle (“SPV”).
- Swap.com has successfully raised €19 million in December financing round led by eEquity. Financing round lowers the financing risk and increases operational flexibility.
- CTI has announced that associated company Nuuka Solutions is planning an IPO in Sweden during 2017 in addition to previously announced IPO plan by Enersize. Nuuka announced pre-IPO financing round in January.
- CTI has been satisfied with the “pop-up” office strategy of setting up temporary offices in Berlin, Los Angeles and Stockholm. Berlin office has had most concrete results with new investors participating in financing rounds of two portfolio companies. Currently CTI is planning a pop-up office in Shanghai.
- CTI mid-term targets are as follows. By the end of 2017 the company’s objective is to have been involved in the IPO of two to three and the exit of one to three of its portfolio companies. The number of portfolio companies is expected to be at 15. Achieving the mid-term targets seem to be on track.
- Cleantech Invest share is trading at €2,78 and below our value analysis (see page 11). Cleantech portfolio value is gearing towards four companies (Nocart, Enersize, Swap.com and Nuuka). Recent value creation has been driven by significant deal for Nocart.

The descriptions, latest developments, and value analyses of CTI’s portfolio companies can be found on the following pages of the report.

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### CTI’s portfolio companies

Company	Description
Aurelia Turbines	The company is creating an ultra-efficient microturbine for distributed power generation
Eagle Filters	The Company provides air filtration solutions that improve performance of gas power plants
Enersize	The company delivers energy savings for industrial compressed air energy systems
Lumeron	The company is a financial services provider for the energy efficiency assets market
Metgen	The company manufactures enzymes to be used in, for example, improving energy efficiency in the pulp and paper industry
Swap.com	Swap.com is operating in the US, the company is an internet-based department store for second-hand goods
Nocart	The company creates utility grade power generation solutions for distributed energy
Nuuka Solutions	The company creates software to help real estate businesses increase energy efficiency and monitor sustainable development
One1	The company makes energy islands in which thermal energy can be generated in a centralized manner for neighborhoods and large buildings
Oricane	The company specializes in data transfer algorithms that can cut back energy use in internet equipment and database systems
PlugSurfing	Company’s app enables EV drivers to find and pay for charging at charging stations
ResQ Club	The company develops and operates a platform that allows customers to purchase edible food from being wasted
Sansox	The company has created an energy-efficient replacement solution for water oxidation pools
Savo-Solar	The company makes the world’s most efficient solar thermal collectors and absorbers
Sofi Filtration	The company specializes in industrial water filtration
Watty	The company creates energy consumption management solutions for households

# Analysis of portfolio companies

## Nocart and Swap.com



### Nocart

**Business:** Nocart creates utility grade power generation solutions for distributed energy. The strength of Nocart's system lies in the fact that the power generation units make it possible to produce electricity simultaneously and efficiently from almost any source of renewable energy. Nocart's market segments include small power plants below 1 MW (off-grid) and grid connected renewable power plants.

**Current stage and future developments:** In December Nocart raised €5 million. In January 2017 Nocart signed a supply contract for the delivery of a 30-40MW solar hybrid power plant to Zambia. The contract is for the first part of a 100MW plant to supply power to a sugarcane plantation. This supply contract was a part of previously announced Memorandum of Agreement selecting Nocart as the technology supplier. The supply contract covers first of potentially several upcoming projects in that Memorandum Agreement. The project will be delivered during the two years from the kick off. Memorandum Agreement is signaling good long term prospects and a very good reference. Nocart has identified a competitive edge with its partners especially in waste-to-energy as a power source. Africa is the main market-area for Nocart.

**Assessment:** Nocart's potential is significant. The company has assessed that their relevant market is very large in comparison to current size. In our opinion the company's business risk is low. This is based on the company's large deal in Zambia and strong foothold in the developing markets. We see the execution of the large order as a main risk also reflected in the discount rate used in value analysis (25%). Nocart has also been profitable since 2012. The current profitable business and the outsourced production keep capital needs small. The high potential combined with a relatively low risk and small capital need make Nocart currently the most important portfolio company for CTI.

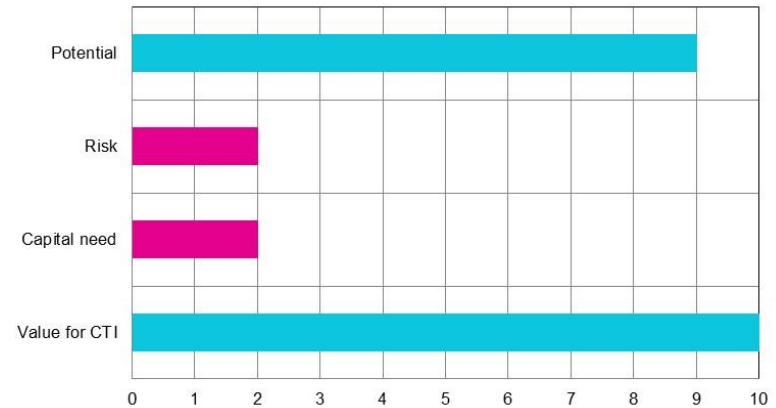
### Swap.com

**Business:** Swap.com is an online consignment store operating in US. Swap.com positions between Amazon (e-commerce) and eBay (a marketplace for transactions between individuals), and connects with CTI's efficient usage of natural resources (recycling). Special focus on lower cost items in the consignment market.

**Current stage and future developments:** Swap.com has been growing 180% year-over-year. The offering has been widened to men's clothing and swap.com is now selling clothes in all categories. Company is currently preferring growth over profitability. Swap.com raised €19 million led by eEquity in December 2016, bringing total equity funding to €46 million. The funding will be used to further accelerate growth. Swap.com has made successful marketing efforts and gained good visibility in US media. With more than 1.5 million unique items Swap.com is the biggest online consignment store in the US.

**Assessment:** We have evaluated Netcyclers' potential as very high. This business model is binary by nature - the competitive advantage gained by the largest competitor is significant. Swap.com has developing steadily and the potential is visible. The overall risk is below average compared to the other portfolio companies and is lowered due to successful financing round in December. Capital need comes from the high growth targets, and capital is needed for marketing efforts. The capital need of the current business moderate in connection to the market value. For CTI's value-creation potential swap.com is significant particularly due to the business's high potential.

### Positioning



### Positioning



# Analysis of portfolio companies

## Enersize and Nuuka Solutions



### Enersize

**Business:** Enersize delivers energy savings for industrial compressed air energy systems. According to the company, their systems can be used to decrease the energy consumption of industrial compressed air energy systems by up to 30% by optimizing the compressed air system.

**Current stage and future developments:** The company has been targeting the Chinese market and its first major Chinese customer has entered into revenue sharing phase in August 2016. Enersize received the first €0,3 million payment based on accomplished energy savings. Total expected income from the contract period is estimated to exceed €1,2 million. Chinese automotive manufacturer Beiqi Foton Motor Co. project in Beijing factory was announced in January 2016 and two new pilot projects with glass producers in late 2016. The two glass producers have 7 and 8 factories in total. Company has a business model that is based on revenue split from savings created. This works as powerful leverage because the costs for each project are low. Enersize has a new executive chairman to lead the company in to IPO in 2017 on First North Stockholm. Pre-IPO is currently under work.

**Assessment:** The use of compressed air consumes a lot of energy worldwide (over 5% of the world's energy needs), which means energy saving systems in this field have significant potential. We believe that the risk carried by the company is lower than average due to successful pilot projects, increasing order backlog and proven revenue model. Capital need is also expected to be below average due to successful project deliveries and high estimated profitability. Enersize's importance for CTI's value-creation potential is high due to CTI's share of ownership and above average potential.

### Nuuka Solutions

**Business:** Nuuka Solutions creates software to help real estate businesses increase energy efficiency and monitor sustainable development. The company focuses on larger real estate complexes. According to Nuuka Solutions, the company's solutions can be used to create significant (10-30%) savings through improved energy efficiency.

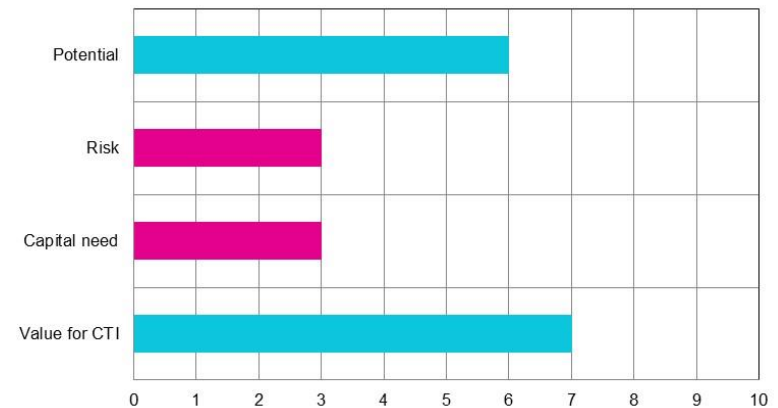
**Current stage and future developments:** Additional investment in sales efforts is an important aim for the company and the current sales model is based on partnerships ranging from small automation companies to leading players such as Caverion. Furthermore, real estate funds can roll-out the product in new funds. Nuuka is also offering air quality measurements that are not included in typical offering by competitors. The company's has currently over 900 buildings in system (300 at the beginning of the year 2015 and 100 at 2014). Nuuka has successfully entered the market in Netherlands and Belgium and is actively expanding its international reach and has taken first steps to enter the Chinese market with a local partner. In Netherlands Nuuka is partnering with Sweco. Furthermore, new CEO has been hired to step up international marketing efforts. Nuuka plans to list in First North Stockholm during 2017 and has closed Pre-IPO round in January including a €100 thousand grant from Tekes.

**Assessment:** Nuuka's potential is above average. The risk is lowered by the fact that the company has a finished service for which commercialization has begun successfully. Also, the company has signed contracts with in Nordics and Netherlands, meaning that the geographical expansion outside of Finland has begun successfully. Capital need is low and mainly centered on increasing sales efforts. Due to Nuuka's fair potential and CTI's large share of ownership, the investment into Nuuka Solutions is significant for CTI's potential for value creation.

### Positioning



### Positioning



# Analysis of portfolio companies

## Aurelia Turbines and Eagle Filters



### Aurelia Turbines

**Business:** Aurelia Turbines is creating a new, ultra-efficient microturbine for distributed power generation. It is being developed in cooperation with Lappeenranta University of Technology (LUT). The company's product is a combination of its own innovation paired with LUT's 30-year long research in high-speed technology. The company's patented microturbine, currently in simulation stage, has proven very efficient in tests and offers 30% efficiency improvement compared to traditional micro turbines and 9% compared to best gas engine.

**Current stage and future developments:** The company is moving towards commercialization phase and four sales agreement has been signed. Prototype testing has been delayed again by approximately six months. The value of a single shipment is high because the unit price for the product is around 0,4 MEUR. The company owns an extensive portfolio of patents and has signed letters of intent for the delivery of around 250 turbines during the company's first 3 business years with value in excess of 100 MEUR.

**Assessment:** Aurelia Turbines is in very early commercialization phase. The potential market for microturbines is significant (under 3,5MW is approximately 30 billion euros), and thus if successful, the company may prove highly potential. However, as an early stage investment we believe the risk is still high. According to our evaluation capital need is relatively low, and the quantity of staff is small during this stage of development. Even if Aurelia Turbines reaches its targets, its effect on CTI's value will remain relatively small due to the small share in ownership.

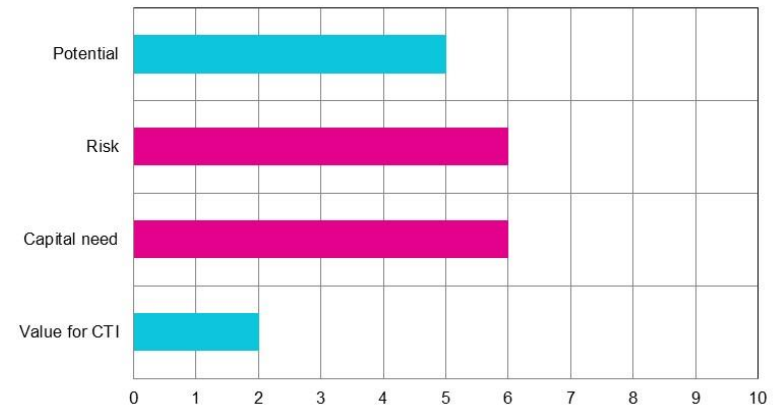
### Eagle Filters

**Business:** Eagle Filters manufactures and develops gas turbine filters for utilities. Eagle Filters has developed patented technology that improves the capacity utilization of gas fired power plants with super efficient air filtering solutions. The product decreases the need to clean the gas turbine to once a year in connection with the annual maintenance. This decreases the need for cleaning the turbine in three month interval as is done with traditional filters. This can save up to several millions of lost production capacity annually.

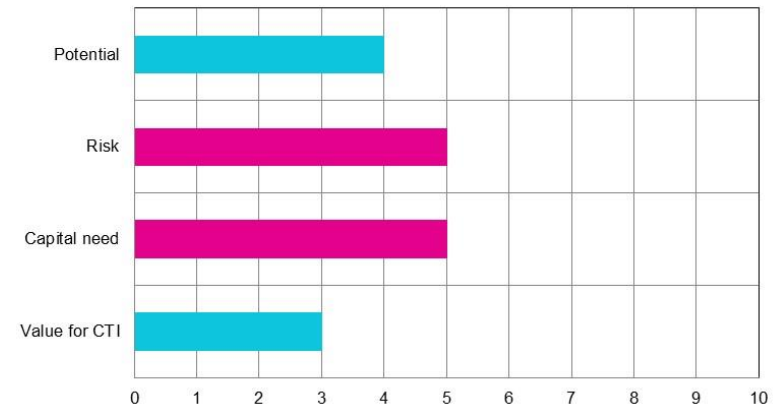
**Current stage and future developments:** Eagle Filters has been operating since 1995. It is currently under restructuring due to weak demand in Europe due to low utilization rates resulting from low price of emission rights. Fire in the factory was a headwind in 2016 but revenue was rising. In developing markets the company is considering changes in the pricing of the product to be based on revenue sharing model from cost savings. Furthermore, one of the largest turbine operators has used the filter in pilot testing with good results. Outlook for 2017 is positive as customer pipeline has been building up and product development has been made that makes the product more suitable as a retrofit.

**Outlook:** Eagle Filters potential is moderate as the market is large but the customers are rather conservative in applying new technology. The risk is above average as the company is currently under restructuring. However, the product has reached the market and the company has been operating for 20 years. The need for capital is average. The product is manufactured in-house which requires capital if growth accelerates significantly but R&D and marketing costs are perceived to be limited. Value for CTI is below average.

### Positioning



### Positioning



# Analysis of portfolio companies

## MetGen and One1



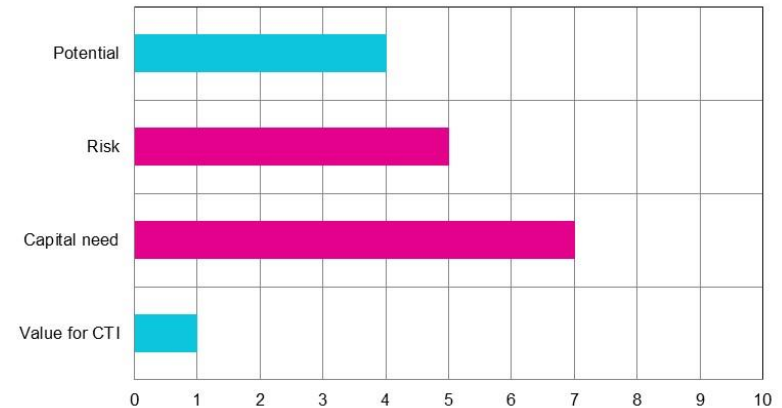
### MetGen

**Business:** MetGen manufactures enzymes to be used in, for example, improving energy efficiency in the pulp and paper industry and efficiently turning bio waste into bio fuel. MetGen's innovations are used to solve problems related to biomass.

**Current stage and future developments:** The development and commercialization of new applications for the product are crucial for the future success of the company. Metgen has launched three new products and filed five new patent applications. There are 25 customers in sales pipeline and two commercial customers and eight in industrial trials stage. Company also added sales agents in Germany and Brazil. Metgen received large funding from EU.

**Assessment:** We believe that MetGen carries fair potential. Even though the manufacturing of the enzymes has been outsourced, the need for capital in R&D is high. This is supported by the fact that the company has needed new capital for its development. For this the funding has come from notable venture capitalists in this field. Due to the new investments, CTI no longer has a representative on MetGen's board of directors. The company's capital need and CTI's small share of ownership limit MetGen's value-creation potential.

### Positioning



### One1

**Business:** One1 makes energy islands in which thermal energy can be generated in a centralized manner for neighborhoods and large buildings. The company says its solutions can create up to 20% savings in costs compared to building-specific ground heat and solar energy solutions. One1's solutions are suitable for areas in which building district heat is not viable. The company's clients are energy companies.

**Current stage and future developments:** The company already has good reference customers in Finland. Co-operation agreement including ownership with two regional utilities (Lahti Energia and Pori Energia) has lead to new projects. In the long term the prospects are still interesting, as funding is inexpensive and the price of district heat is rising. The advancement of commercial projects is the company's short-term goal.

**Assessment:** In our opinion One1's potential, compared to CTI's other portfolio companies, is below average. The company has good reference deliveries, which decreases risk, but is yet to make a commercial breakthrough, although first larger projects have been signed. Since energy companies with strong balance sheets are financing One1's projects, its need for capital is small. One1's value-creation potential for CTI is average.

### Positioning



# Analysis of portfolio companies

## Oricane and PlugSurfing



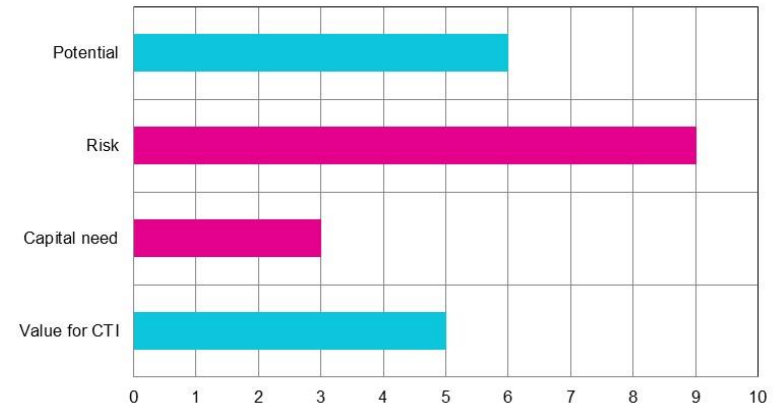
### Oricane

**Business:** The company specializes in data transfer algorithms that can cut back energy use up to 50-95% in internet equipment and data base systems. The Internet is increasing its share of world energy consumption the fastest.

**Current stage and future developments:** Oricane has made progress with commercialization. A deal was announced where Mosys customers can decide if they want the Oricane algorithm (BioCAM) to its Programmable search engine platform. However, the revenue from this agreement is hard to estimate beforehand.

**Assessment:** According to our assessment, Oricane carries a high potential as the benefits gained by using the company's software seem to be very large. The company is still in a binary phase as the commercialization efforts have not resulted in clear visibility of income streams. Capital need of the company is due to negative cash flow, but the business is scalable (software). Due to Oricane's high potential, the company carries average value-creation potential for CTI. The value is limited due to the binary business model.

### Positioning



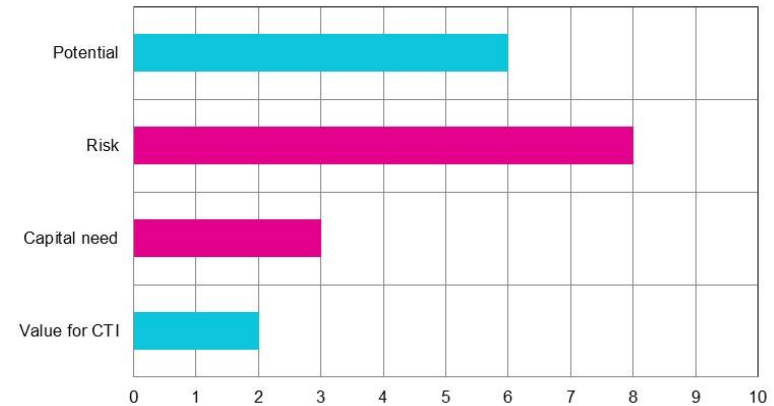
### PlugSurfing

**Business:** PlugSurfing is a Berlin based company that has developed a mobile application for electric vehicle (EV) drivers. The application is used to find EV charging stations and enables customers to pay for charging. Furthermore, customers are able to share charging station information through user community. Currently the application is available in Germany and Netherlands.

**Current stage and future developments:** Company was founded in 2012 and currently the company has two sources of income. PlugSurfing takes a sales commission of up to 20% from charging. However, many of the charging stations are currently free which limits current revenue generation. Second income stream is selling anonymous data of charging customers to partners in the EV sector. The focus of near term development is on customer base growth and the development of revenue model.

**Assessment:** EV market is growing very rapidly and is of interest to for example large automotive companies. PlugSurfing has an interesting position with valuable access to customer information. Therefore, we see significant potential in the company value. However, the market is in early stages and the revenue model is not fully developed, although progress has been made. We see significant risk in realizing the initial potential of the company. Capital need is perceived to be fairly low as the software company has good operational leverage and it already has two different revenue sources. Value for CTI remains limited due to high risk and small share of ownership.

### Positioning



# Analysis of portfolio companies

## ResQ Club and Sansox



### ResQ Club

**Business:** The company develops and operates a location-and-time-sensitive market platform that allows customers to purchase at a discount edible food from being wasted. They purchase portions via the app and retrieve the portions from the provider's venue. This way restaurants, bakeries etc. can turn their servings surpluses into an opportunity to earn additional income and attract new clients.

**Current stage and future developments:** ResQ Club was established in 2015 and the service was launched in January 2016. Growth has been rapid and ResQ has over 60 000 registered users and over 100 000 portions are "rescued" daily. The company is expanding in Europe and has international operations in Amsterdam, Berlin, Hamburg, Munich, Tallinn and Stockholm. Soft launch has been done in Canada.

**Assessment:** According to our assessment, ResQ Club carries average potential in medium term considering high scalability of the business model with early stage of the company. The company is still in early phase, although, the Finnish business has proven the business model works. Capital need of the company moderate due to negative cash flow and marketing costs. ResQ Club carries currently relatively low value potential for CTI due to early stage of the company.

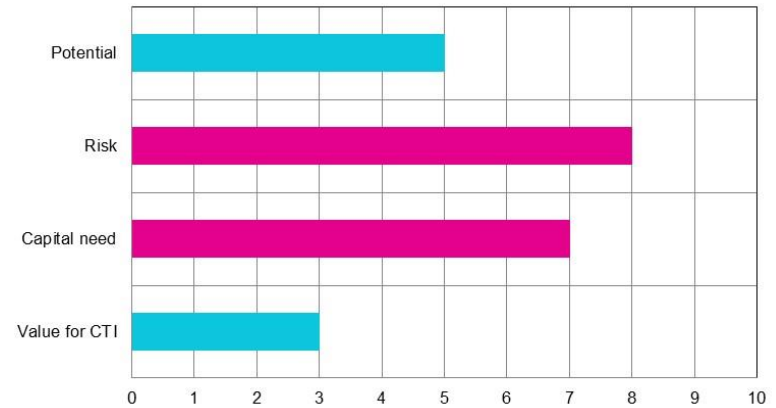
### Sansox

**Business:** Sansox has created an energy-efficient replacement solution for water oxidation pools. Oxidation plays a crucial role in water treatment. For example, it allows for the optimal functioning of the deposition processes for metals and other solid substances. Sansox's oxidation system, which may be attached directly to water circulation, can completely or partially replace expensive oxidation systems now used by industry.

**Current stage and future developments:** The company's product is in the pilot phase and being used in fish farming and at an aluminium can factory. First small deals have been signed. As its unit price is rather low, scalability is important for Sansox's product. Sansox has made a deal with Chinese distributor covering one application area in the Chinese market. Currently there are ongoing pilot in irrigation water system in Spain and the results are due shortly. Irrigation would be a scalable business and therefore the results are important.

**Assessment:** The water oxidation systems market is very large (10-20 bln euros globally). Sansox's potential is, however, reduced due to the challenges of scalability. Company has been unable to find an end-use that has scalability, which lowers the potential of the company. Production has been outsourced, which lowers capital needs, and the company's structure is rather lean. Sansox value-creation potential for CTI remains limited due to low potential, high risk and CTI's small share of ownership.

### Positioning



### Positioning





# Analysis of portfolio companies

## Sofi Filtration ja Watty



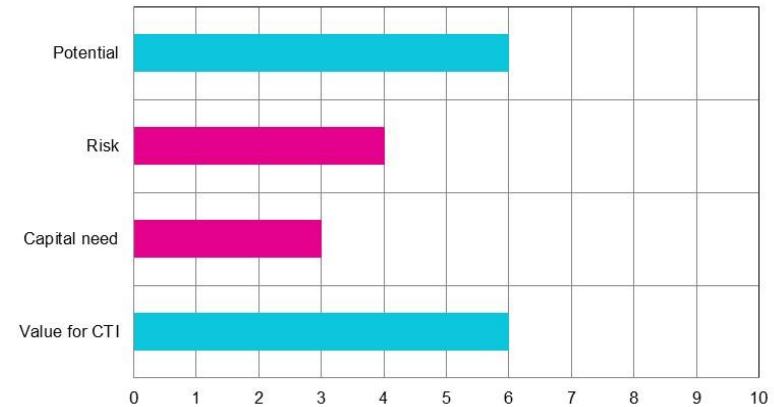
### Sofi Filtration

**Business:** Sofi Filtration is a company that specializes in industrial water filtration. The company's main product is an automatic microfiltration system that uses new cross-flow filtration technology. With this system it is possible to economically filter large amounts of industry process waters that contain fine solid particles. The product's ability to self-clean and filter precisely give it a competitive advantage.

**Current stage and future developments:** The company has had advances in finding scalability. Previously the sales effort was directed in mining. Now new business opportunities are seen in utility scale power plant scrubbers, fire boilers, district heat and infrastructure construction. Identified deal opportunities has grown significantly and sales are accelerating rapidly. Sofi has opened an office in Texas which is used to analyze possible use cases and first deal in the US is in making.

**Assessment:** Due to the fact that they are rare, innovations related to water technology are generally considered interesting. We assess Sofi Filtration's potential above average when compared to CTI's other portfolio companies. Risk related to the technology is low, the product is protected with patents, and commercialization is gaining traction. We see potential due to advances in finding scalable client industries and increased potential deals and international efforts. Due to the fact that production has been outsourced, capital need is low. The company's value-creation potential is above average.

### Positioning



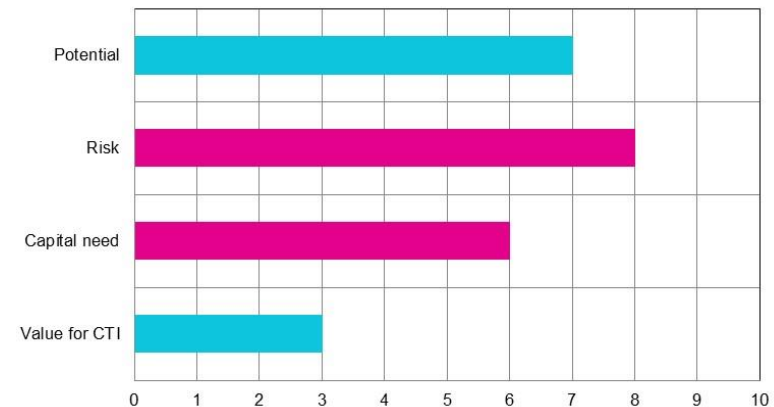
### Watty

**Business:** Watty is a Swedish company that provides households a product that identifies energy using appliances in the home with one low-cost hardware. The Watty solution (hardware and algorithm) can automatically identify what energy-saving actions or products are suitable for each home.

**Current stage and future developments:** Watty has an interesting offering for households that enable customers to reduce their energy costs and compare the use of energy. Currently the company is beginning its commercialization. The company is currently piloting its solution with two large energy companies and the product is sold as SaaS with monthly revenue. Electricity is commoditized and Watty's service enables the utilities to lock in their clients with additional electricity usage related service. The Watty algorithm is scalable in many markets but has to be adjusted to reflect different hardware and usage patterns. One of the pilot customers is one of the largest energy companies in Germany and the company is also taking first steps to enter US market. Watty has had a new round of financing (€3 million) including CTI SPV and EQT Ventures.

**Assessment:** We assess Watty's potential as above average due to scalable business model. The company is at early stage which increases risk, however, commercialization is advancing. Capital need is moderate. The company's value is below average due to the small ownership share (4%).

### Positioning



# Analysis of portfolio companies

## Savo-Solar and Lumeron

### Savo-Solar

**Business:** Savo-Solar manufactures the world's most efficient solar thermal collectors and absorbers. The company also designs and produces entire solar energy systems. Compared to the competitors, Savo-Solar's products are able to produce 20% more energy throughout their life cycle. This is a result of their own patented coating technology and the "direct flow" technology and structure of the absorbers, and gives them a competitive edge.

**Current stage and future developments:** Savo-Solar was listed in OMX First North Sweden. SavoSolar estimates that the company's full-year revenue 2016 will be more than double the revenue in 2015, i.e. approximately EUR 4.5-5.5 million. By beginning of 2017 the production capacity will be doubled. Additionally the efficiency in the manufacturing has improved significantly, resulting in over 70% decrease in working hours per collector in 18 months.

**Assessment:** Savo-Solar has been listed in OMX First North Sweden and therefore the market value of the company is assumed to reflect the fair value.

### Lumeron

**Business:** Lumeron is a financial services provider for the energy efficiency assets market. It focuses on financing investments into material and energy efficiency, and has been founded to provide help in solving problems typically related to cleantech investments. Even though the company is in itself an independent investment for CTI, the nature of its operations allows it to benefit from synergy with CTI's other portfolio companies.

**Stage and future developments:** The company is still in its early stages and is not currently actively been developed.

**Assessment:** It is difficult to analyze Lumeron's risk and potential because the company is still in its early stage of development and the business model is still somewhat undefined. We believe that Lumeron's potential is smaller than the potential of CTI's portfolio companies on average and the value contribution potential is currently assumed to be non-material.

# Analysis of portfolio companies

## Summary



### Potential and risk

We have analyzed the potential and risk of each portfolio company individually. The resulting positions can be found in the graph adjacent. In portraying potential we have used a scale of 0-10 to compare the financial success of each company. This makes the analysis a subjective one. We have also analyzed risk in a similar fashion. Due to the nature of the companies, they all carry quantitatively high risk and high potential.

When analyzing the companies with their business models and market sizes, Swap.com stands out with potential for explosive growth. Nocard has continued to develop favorably and offers excellent potential with more limited risk. We use the developmental stage of each company to evaluate its risk. We believe Sansox, PlugSurfing, ResQ Club and Watty carry the greatest risks. The aforementioned companies are all in their early developmental stage. Oricane's high risk has to do with the achievement of its high financial and operative goals.

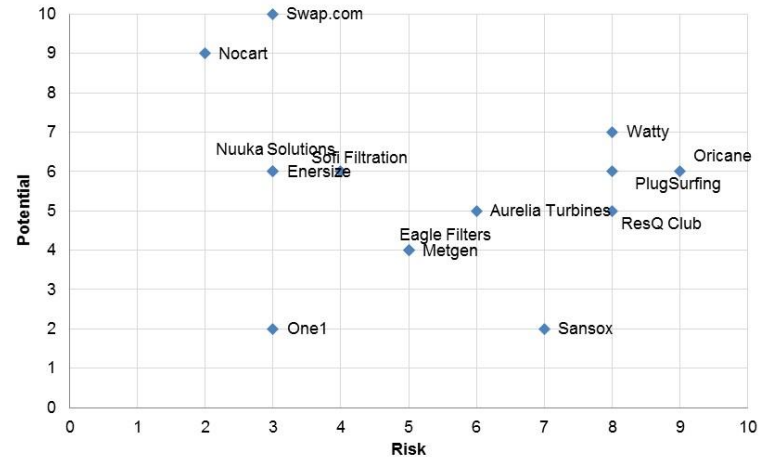
The binary nature of Swap.com and Oricane's business models is a risk factor, this risk has decreased significantly for Swap.com since the growth trend seems to be stable. Enersize, Nuuka Solutions and Nocard carry smaller risks, which is explained by the expected positive mid-term term cash flows.

### Potential and capital need

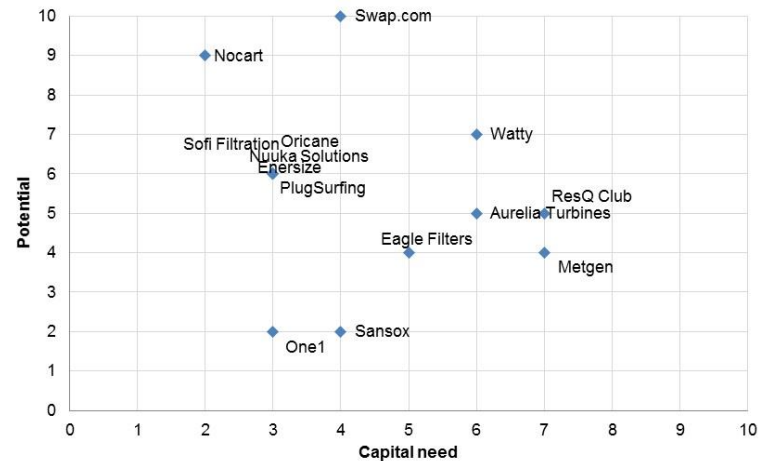
CTI looks to avoid investments into capital-intensive companies and aims to invest in companies with a highly scalable business model. Capital need describes the amount of capital needed for business growth in the medium term.

Nocard's positive earnings improving financial performance is diminishing its capital needs. Due to their early stage of development, we assess the capital need of Aurelia Turbines, Metgen, ResQ Club and Watty as relatively significant.

### Potential and risk



### Potential and capital need



# Analysis of portfolio companies

## The value potential of current investments



### Cleantech Invest - Value analysis

Company	Sales 2020e	EBIT 2020e	Value 2020e	Discount rate	Present value MEUR	Current ownership*	Dilution 2020e	Present value for CTI MEUR
Aurelia Turbines	50	5,0	100	60 %	15,3	3,8 %	40 %	0,3
Eagle Filters	20	3,0	45	55 %	7,8	10,0 %	35 %	0,5
Energize	35	10,0	150	45 %	33,9	42,7 %	25 %	10,9
Metgen	10	3,0	60	55 %	10,4	2,7 %	45 %	0,2
Sw ap.com	300	30,0	750	35 %	225,8	5,3 %	30 %	8,4
Nocart	200	30,0	600	25 %	245,8	21,4 %	15 %	44,7
Nuuka Solutions	35	7,0	119	40 %	31,0	34,3 %	30 %	7,4
One1	15	1,5	19	45 %	4,2	12,9 %	30 %	0,4
Oricane	15	7,5	113	80 %	10,7	21,2 %	30 %	1,6
PlugSurfing	30	6,0	120	70 %	14,4	2,5 %	30 %	0,3
ResQ Club	12	3,5	88	70 %	10,5	8,7 %	45 %	0,5
Sansox	10	1,5	23	65 %	3,0	9,2 %	35 %	0,2
Savo-Solar	-	-	-	-	10,6	2,4 %	-	0,3
Sofi Filtration	35	6,0	90	50 %	17,8	23,1 %	30 %	2,9
Watty	20	8,0	200	70 %	23,9	4,0 %	40 %	0,6
<b>Total</b>				<b>55 %</b>	<b>665,1</b>		<b>33 %</b>	<b>79,0</b>
Estimated liquid assets								0,8
<b>CTI value (MEUR)</b>								<b>79,8</b>
Value per share (diluted)								3,12

### Sensitivity analysis

MEUR	Discount rate +/-				
	-10 %	-5 %	0 %	5 %	10 %
Dilution +/-					
-10 %	4,79	4,09	3,52	3,04	2,65
-5 %	4,52	3,86	3,32	2,87	2,50
0 %	4,25	3,63	3,12	2,70	2,35
5 %	3,98	3,40	2,93	2,53	2,20
10 %	3,72	3,17	2,73	2,36	2,05

\* NB! Current ownership includes possible indirect ownership through Clean Future Fund Ky (calculated with a 36,85% ownership) and possible conversions resulting from convertible bonds.

### Value analysis

CTI's value analysis is based on the value analyses of all of its current portfolio companies.

We have analyzed the business prospects of the portfolio companies in the medium term. Year 2020 has been used for the forecast. The company's value in 2020 is based on the approximation of the company's exit-value, or selling price if the financial performance of the company is materialized as expected.

We have assessed the additional amounts of capital needed for the growth of each portfolio company with the dilution effect. We have predicted these values, and they show the rate at which CTI's current ownership of the companies will dilute in the absence of additional investments by CTI. We base our predictions of the dilution effect on our assumptions of each company's capital needed to reach the targets of 2020.

CTI's investment portfolio consists of early stage companies, which means they carry significant risk in their business. For this reason we have in our calculations used a discount rate normally applied in the case of early-stage companies. The rate is much higher than the regular rate for a listed company. The rate is determined by our view on the company's phase of development and the risks associated with the business model. Listed companies (Savo-Solar) is valued using the market price.

We have not deducted holding company discount as CTI has been able to add significant value through SPV transactions. CTI has sourced investors to portfolio companies and has been able to participate in financing rounds with out own capital. We estimate that the value of these SPV transactions are at par to the costs of the holding company.

The sensitivity analysis regarding the discount rate and dilution is presented in the table below. Sensitivity analysis highlights the significant impact of the applied discount rate on the value of CTI and alternative scenarios can be applied using the sensitivity tables.

The most noteworthy risk factors of this value analysis are: (1) the significant business risk inherent to the early stages of the portfolio companies, (2) the forecasting of the financial development of the portfolio companies, (3) dependency on key people.

FIM has signed a contract with the company on the preparation of the analysis, and based on this FIM has been paid a fee by the company. FIM does not pronounce an investment recommendation or a target price for the shares of Cleantech Invest.

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