INRiSC

CREDIT ANALYSIS REVIEW – FINAL

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1. Introduction

This memorandum concerns the high-level credit analysis in connection to the notes issuance of NewLight Africa Ltd (Heya!) arranged by Lendahand (the '**Client**'). The scope of the review is limited to a general review of the credit-related risks in association with the Issuer (NewLight) and the potential issue (the notes issuance). This memorandum does not intend to provide any advice regarding a potential investment in the request under review. Client should make its own considerations and investigations regarding any investment or any offering thereof made to its customers and clients as intended. No rights can be derived from the use of this document. We note that, apart from credit risks, various other aspects might be relevant when considering an investment, e.g. (local) market circumstances, technology risk, country risk, etcetera. The analyses of such other aspects are excluded from this review. Any comments made on such aspects should be seen in conjunction with credit-related analyses and have no value of their own, nor intend to indicate any deeper analyses of such underlying aspects. Information used in this review is limited (as referenced in Appendix A.1). No due diligence or verification of information received has been made. INRiSC has no further interest in the Issuer or the notes issued. INRiSC is not supervised by any regulatory body.

2. Notes issuance & summary

The request concerns:

- A senior ranking, covenanted, **EUR 1 - 1.5m** facility, the first drawdown amounts to EUR 100-150.000, each note has a maximum maturity of **4** years, expected maturity of drawdowns to be 18 months, with semi-annual, linear repayments.
- A UK based limited liability company, specialized in the last-mile-distribution of goods such as the delivery of Solar Home Systems (SHS), Cooking stoves and other goods in East-Africa, notably Kenya;
- Financing for working capital purposes, predominantly the financing of cook stoves (including the pre-financing of vendor lease program).

RISK ANALYSIS OVERVIEW	
Pros	**Cons**
Company	
Management has knowledge of local circumstances (socio-economic & regulation)	Limited (relevant) credit history
Strong focus on competencies	Scale-up, structural changes to organization
Strategic partnerships with respectable local citizen collectives; 'Chamas'	
Business	
Large market for sustainable (energy) solutions	Country risk at Kenya, for the moment
Horizontal specialization. Company focuses on its added value in the supply chain, namely being the best last-mile distributor.	Company is still early staged in their life cycle
Reduced supply chain complexity due to outsourced production with partially prefixed prices and margin deviations	The Customer Relationship Management systems and other operational systems are still in development
Can adopt more rapidly to new innovative designs/products available on the market	Higher counterparty credit risk on certain products due to lack of GPS lock-out
Truly targets the Bottom of the Pyramid due to its lower costs of production	Limited oversight over sales tactics used by sales agents
Benefits from partnerships with Chamas: ▪ being able to sell products without a GPS lock-out more securely ▪ partially limiting the credit risk on sales agents	
Product	
Reseller with superior logistical capabilities	No GPS lock-out possible
Offers lower priced products	Faces more competition from generic products especially on the PICO (a smaller type of solar lantern) market
Is more flexible in product offering to end-consumers	
Financials	
Chamas, the women cooperation groups, act as a third party guaranteeing the repayments risks of the sales agents	Relying on projections that could change due to structural changes to the organization
Company has a strong overall liquidity position and sufficient cash at hand	Repayment depending on payment behaviour of end-customers and credit worthiness of Chama
	Portfolio risks measurement is not in line with industry standard and therefore not comparable. However, the method that is used is more stringent which can be seen as a positive
Notes	
Medium term; maximum of 4 years with semi-annual repayments	FX risks
Working capital purposes, e.g. financing of cook stoves	Indirect credit risk on consumers
Notes Structure	
Senior facility	Unsecured
	Financial covenants, with limited strength

3. The Borrower

3.1. The company

The company, NewLight Africa Ltd, is a London based company with activities through its subsidiary Heya! that focuses on the distribution of off-grid appliances in rural Africa. Founded in 2015, it is a relatively young company. It aims to support millions of rural Africans by selling them life-changing products. Heya! identifies itself as a distribution company specialized in last-mile distribution targeting the Bottom of the Pyramid (BoP). Although solar products were 80% of their sales since inception, the company does not regard itself as a Decentralized Electricity Company (DESCO). The reason is that they are selling a wide range of products, using their distribution network. In November cookstoves represented 41% of sales, proving the company's strategy to diversify its product offering which allows them to further leverage their logistics and reach capabilities. At the moment, it seems however that the company must compete with other DESCO's until its product offerings are more differentiated. Currently the company operates in six countries trading as Heya! Over 50,000 products have been sold since launch in January 2016 (as of July 2017).

The customers live off the beaten track. They are unconnected and often poorly educated and cannot research which products are the 'best buys'. They do not have access to trusted retail shops that will sell them quality products and look after them with after-sales care and warranty support. The customers of Heya! do not have bank accounts, credit scores or access to consumer credit. Customers need help buying the appropriately priced products. According to Heya! most of the well-known solar home system offerings are out of reach of 90% of the rural populations.

Micro Financing Institutions (MFI's) inspire the distribution and collections model used by Heya! The company sells the product to an agent, the agent purchases the inventory on credit allowing him to afford a larger quantity of products. The agent on their turn sells it on credit to the customer with a profit margin. Making the product affordable to the customer, who repays the agent a certain amount per month. All products are paid in instalments of $3 per week. This amount has proven to be affordable to a large customer demographic. It is the repayment period (minimum 9 and maximum 25 weeks) and not the instalment amount that will vary from one product to another. The agent collects the instalment from the customers, reducing transportation and collection costs, reducing default rates as the agent has vetted the customer and is able to exercise social pressure to repay as they are from the same locality.

Heya! has a highly distributed four-tiered sales network extending to the village level. The first tier is the county level presence through physical offices that helps to build brand image and gain community trust. It guarantees fast customer services, including warranty support. It also acts as inventory fulfilment and safe warehousing centre, recruits Field Sales Reps (FSRs) at Sub-county level, manages finances and acts as a base from for the training of FSRs and sales agents.

One level down is the sub-county level presence through FSRs: employed, mobile, local salespeople. FSRs recruit, support and supply 20 sales agents each. This reduces transportation costs since FSRs live in the communities. It builds long-term relationships with sales agents extending customer lifetime value and guarantees fast order fulfilment since FSRs hold small inventory volumes. The FSRs collect the money from the agents. These FSRs know the local groups and only recruit trustworthy agents. On their turn, they can put social pressure on the agents for repayment.

The third and fourth level are the village and town level presence through trusted sales agents and village elders (fourth level) elected by local groups. The community leader guarantees the payments from the customer to the agent, for this service, the agent pays the community head for providing this guarantee. Community leaders have been selected from among the Chama group. A Chama is a women's group that comes together to do business and run savings and loan programs. If the customer misses a payment, the agent guaranteed by the Chama, is still obliged to repay Heya! The Chama together with the sales agents is the last mile sales force. It drives sales and trust as agents are members of the community and chosen by their peers. Furthermore, it reduces transportation time with agents being hyperlocal and covering only a narrow geographical area. Every agent has a few customers ordering new products on an ongoing basis. To remain agents, agents need to sell a minimum number of products per month (currently 10). This minimum justifies the acquisition cost of agents and the order fulfilment cost. It also stretches agents to sell beyond their immediate family and to make repeat sales to existing customers.

3.2. Management

The Board of Directors reflect an international track record in engineering, financial services, and business development in emerging countries.

Co-founder Steve Andrews leads the executive management team. Former Global CEO of SunnyMoney, a non-profit company which Mr. Andrews led from sales of 300 to 75,000 lights per month, making SunnyMoney the largest last mile distributor of solar lights on the African continent. Previously Mr. Andrews was the owner/MD of Whitewater, a leading direct marketing agency, serving the non-profit market in the UK. He successfully exited Whitewater in 2007.

Mr. Fouad Aoun is the company's Chief Operating Officer. A former Consultant at Bain and Company and MBA Graduate from Harvard University. Fouad first worked at NewLight on a seconded basis from Mercy Corps (an investor) while working as a Senior Adviser on Social Ventures as part of his Harvard University Leadership Fellowship. He recently joined NewLight as COO/ CFO in April 2017.

Miss. Linda Wamune acts as the general manager of Kenya. As a former managing Director of SunnyMoney Kenya she was a close colleague of Mr. Andrews for over 6 years. She led SunnyMoney Kenya to become the largest last mile distributor of solar lights in Kenya. Prior to SunnyMoney, learnt about retail through 8 years of working in sales for Davis and Shirtliff, an East African company selling water pumps, solar power and other domestic products.

INRiSC interviewed Mr. Andrews for the purpose of writing this report.

3.3. Credit history Borrower

The parent company (NewLight Africa ltd) was founded in 2015. The operating company Heya! was also founded in 2015 and is fully owned by Newlight Africa ltd. The company has a relevant credit history of 2 years. There are no signs that the company has had problems in the past fulfilling their financial obligations.

The company has received $500,000 in repayable grants, meaning a very soft loan, with no interest. The grant needs to be repaid in quarterly instalments between 31st March 2019 and 30th June 2021. The company also attracted commercial funding from Sunfunder. They are looking for a further Inventory Finance Facility from the same party in order to purchase solar lights.

4. Business analysis

The key business driver of Heya! is the growing decentralized electrical appliances market in Africa. The business of Heya! is strengthened by the use of (vendor) leasing options (payment plans), to grant a larger customer base access to energy and electrical appliances. Due to the growth of mobile banking technology and subsequent supportive infrastructure to consumer credit activities in Africa companies, companies can offer financial support in liaison with their products. Due to the focus on logistics instead of a certain product, Heya! expects to be more susceptible for new products and innovations. The company is planning to increase their product offering over the coming year to include; water tanks, smart phones and larger Solar Home Systems.

Solar products and especially the PICO lights (PICO meaning very small) are important to Heya!, mainly because the solar light market is huge in Africa. There are 600 million people in Africa living off-grid, of which 99 million are in Heya!'s first three target countries (Kenya, Uganda and Tanzania). The solar light market is growing at an incredible pace across Africa. Solar lights are not just another product, they are a crucial first step after which complementary sales can take place. In Kenya families that buy a solar light save a huge amount of money: $163 per year in Kenya. The money that is saved by the customers can be spent on improving their lives.

Not in line with the company's strategy of merely focusing on logistics, Heya! has launched its own low-cost brand solar home system retailing for $60. Heya! positions itself as price-fighter among other Decentralized Energy Companies. They also acknowledged that they will not produce more in-house products. Solar Home Systems (SHS) now make up around one-tenth of their sales but the company is aiming to increase this to around a quarter. This means they will need to be selling 1.000 SHS per month. At the moment, their most demanded and sold product is a $30 phone charging solar lantern, of which the sales numbers are above 4.000 per month. Of the company's product offering, cookstoves sales are currently the fastest growing.

The current sales model is unique to Heya! The advantage of using the Chama is that it enables the company to offer products without a GPS lock-out system. Other companies selling solar equipment on a lease integrate GPS in their products. The GPS can be used to shut of the appliance if the customer misses a payment, therefore it's an added safety aimed at ensuring payments from the customers. Not having this feature is a risk, which is hopefully offset by the guarantee of the Chama. By omitting the lock-out function Heya! is able to save on the costs related to the GPS on their solar products and offer these cheaper than their competitors, making the product even more affordable for their customers. By focusing on social actors instead of technology in ensuring repayments the company is better suited than their competitors in getting products on the market that are unsuitable for GPS, like the cook stoves financed through the notes issuance.

In this model, the community leaders are crucial in mitigating the counterparty credit risk the company has on their sales agents and eventually on the end-customer. The company does not require substantial down payments from the agents reducing capital at risk and promoting payment behaviour. The company is revising the current model and are performing several tests aimed at gaining a better insight in Chama credit worthiness and reducing the number of agents with payment arrears. The layer of sales agents could be cut entirely out of the distribution model, in this scenario the Chama would be selling directly to the end customers. If the agents would be removed this could improve the margins for the remaining layers. These changes could also cause unforeseen risks to the business case.

The sales of 2017 was lower than projected. The reason is that the company decided to invest in processes and systems as the growth trajectory was considered too high for the processes and capacities to cope with. The company is in the midst of setting up a better network, improving their credit policy and implementing a bad debt unit. In general adjustments include a stricter collection of data; the company verifies phone numbers and makes sure that the Chama is well established. The Chama should also have a pool of cash they can tap into and have the phone numbers of the community leaders. The troubled elections in Kenya and the draught also lowered demand.

The credit assessment process strongly leans on social surveillance by the community in which the applicant lives. According to Heya! the new policies have yielded some initial results; bad debt stopped growing as a percentage of sales. However, it is too early to see the exact results. Heya! uses a different methodology for assessing the PAR than their competitors making comparison with those competitors flawed. Heya! uses a more stringent method of reporting on the PAR figures. Debt write-offs increases the costs of capital and are included in the financial projections delivered by Heya!

5. Financial analysis Borrower

Please note that INRiSC has not tested the reality of the projections in terms of market share captured, underlying price levels, costs related to the realization of the product or its components. Nor did INRiSC test for consumer payment behaviour, payment terms or consumer default rates and loan losses in the operating countries of NewLight.

The company reached a turnover of U.S. Dollar USD 1m+ in the first full financial year, FY2016-17. The company has raised over USD 2.3m raised in equity investments and over USD 1.5m raised in grants. In 2018, the company is planning to raise a further USD 1-1.5m equity and an equal amount of debt. The projections are based on a sales forecast and financial model provided as is and are based only on the delivery of a high- and low-margin solar product and a high margin cook stove product. Additional utilities have not been included in the forecast.

NewLight pays its supplier in USD. The Kenyan Shilling (KES) and the USD are not pegged to one another creating a forex exposure. Cash flows and debt service capacity are also exposed to forex risk. The fulfilment of EUR payments required by NewLight is subject to the movement in forex rates in both currencies. The exposure to other local currencies are not taken into consideration since operations in these currencies are not known to INRiSC at present.

Key financial ratios, projected, excluding notes issuance	2017	2018	2019	2020
Current ratio	8.38	3.94	6.56	4.70
Total debt/EBITDA	Neg	Neg	Neg	1.84
Gearing	0.10	2.42	1.55	0.84
Own and Assoc. M/Tot Assets	0.80	0.23	0.33	0.43
Interest cover ratio	-92.74	-31.45	-8.14	5.60
Debt service cover ratio	-92.74	-31.45	-8.14	5.60
cash cover ratio	94.8	-39.0	-18.1	-54.2
Solvency ratio	0.8	0.2	0.3	0.4

Financial Ratio Table

5.1. Liquidity

Cash coverage in Heya! is highly dependent on sales versus collection of payments. The latest collection numbers from the months August to November 2017 has shown healthy growth. As a distributor Heya! is exposed to a long cash cycle due to the payment terms offered in the vendor leases to their sales agents. The projections indicate that Heya! will improve their stock rotation in the coming years. A higher stock rotation means a higher cash coverage as the inventory is sold at a greater pace. Currently the company has a strong cash position and is planning on maintaining this position well aware of the risks associated with the start-up phase. The accounts receivable position positively affects the current ratio, which is further strengthened by the relatively large cash position of the company.

5.2. Solvency

Solvency deteriorates over the projected time period, this is mainly due to accumulated losses influencing the equity position of the company. In real terms the equity position more than doubles over the four-year period. The company wishes to raise $1.75m equity by March 2018. We see that the company is thinly capitalized in 2018, mostly due to accumulated losses. The corporate finance firm Clermount will assist in raising the equity. Clermount partially raised the equity for Mobisol and other DESCO players. There are currently two institutional investors invested in the company, being Persistent Energy Capital and Mercy Corps. It will take the company till 2020 to achieve a positive EBITDA. Currently the company only has a limited credit line with Sunfunder. There are talks with Sunfunder to increase the limit. NewLight further believes it will receive more grant funding in the coming year.

5.3. Cash flow analysis Borrower

Due to the vendor leasing program the net cash flows are negative. The amount of accounts receivables increases faster than the account payables. Working capital is allocated for a yearly doubling of the stock levels and the growth of account receivables in relation to the payables. This causes the company to have a negative cash conversion, it in itself a logical result from the life cycle the company is in. The company as a whole will only produce a positive EBITDA in 2020. Therefore, currently growth as projected is financed by contracting new debt and equity.

6. Collateral analysis

The notes issuances are uncollateralized, there are no security rights in any of the firm's assets, nor in its IPR. General loan servicing for the notes depends on cash flow to be generated through sales, and effectively received through lease payments. As mentioned there is no failsafe in that the company does not has the ability to shut down the products operationally if the customer fails and continues in failing to make lease payments. As of yet the company has only repossessed unsold products from agents. Heya! does minimize this risk by only offering short terms, shorter than their competitors. The company offers a maximum duration of 25 weeks on their credit.

The Sunfunder Inventory Finance Facility is secured with security interests against inventory of solar lights. This includes a buy-back agreement with the supplier in the event of a NewLight default. NewLight also has an unsecured loan with Trine, an impact investor. There are no signs that this loan would have a preferred standing compared to the notes issuance at hand. Further indebtedness to finance projected growth is needed and new debt may affect the current position of the lender (even though pari passu).

7. Risk analysis

The risk of NewLight not fulfilling its obligations towards the notes strongly depends on the payment moral and debt service ability of the end consumers to the sales agents. They have partially mitigated this risk by working together with the Chama. In practice, it is unclear how much risk the Chama are willing to absorb. The value of their guarantee will become clear in the case more sales agents default. This is apart from the fact that the operational layers can change possibly influencing the projections on which INRiSC based their analysis. The company expects that the profit margins across the value chain will grow, leading to higher profits for the company.

There is a rudimentary credit check performed on the Chama and the sales agents, this process is complicated due to the lack of credit history. The company itself also makes bad debt reservations. The leases have a limited duration, currently with a maximum of 25 weeks. By choosing not to use a GPS lock-out and asking for a down payment, the company accepts a greater counterparty credit risk. How much of this risk is mitigated by the guarantee of the Chama is unknown. The pay out of taking this risk is the potential gain in market share by being able to offer cheaper products. If payments on the leases start lagging and the Chama do not fulfil their guarantee, the debt servicing ability of NewLight will decrease.

The notes issuance will finance the working capital of Heya! including the financing need due to the vendor lease program. The notes issuance is contracted at the holding level, and passed on to subsidiary for the use of working capital. As far as INRiSC can ascertain all other loans and grants are contracted at the holding level. Other working capital financing attracted by the company is secured against the debtors and inventory of the company. New (senior) financing from third parties at the level of Heya! may affect the position of the notes, if and when such (re)financing occurs, depending upon the conditions of such new indebtedness. In principal, the notes are equivalent in status to each other and other (senior) debt (pari passu).

A. Appendices

A.1. Information used

The information used in this analysis were obtained from Client and include:

- Business presentations;
- Organizational chart and individual shareholdings;
- Annual accounts 2015, 2016 & 2017;
- Financial projections offered by NewLight;
- Term sheet notes Lendahand;
- Loan documentation;
- Shareholder documentation;
- Interview conducted between NewLight management Mr. Steve Andrews (CEO) and INRiSC.

A.2. Concept term sheet