# **Global Solar Roll-Out Model**



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## **Executive Summery**

Offering easy to install 1000 PeakWatt solar kits in a IIY (Install It Yourself) model to the global market. With a very attractive price level of an earn back times of 4, 5 or 6 years (depending on the sales channel) and than two decades of free energy. These 1000 PeakWatt solar kits will make solar power much cheaper than grid power.

When solar power becomes much cheaper than grid power it reaches a turning point. Than it becomes an offer that will not be refused. It will hit the market hard. Very hard. Exponential growth figures will be the case.

Such growth needs a financial model to facilitate/channel these multi digit growth percentages. Certainly when the supply comes from the other side of the world aka has sea travel time of 30 days. The only model capable to facilitate this kind of volume (regardless any equity size) is supply chain finance.

In the supply chain finance model the credibility of the debtors can be pulled into whole business case. This narrows the possible turnover range (aka marketing/sales) to orders of credible creditors. Only orders of those can be put in the 'supply chain finance engine' and therefore can be serviced.

So limiting (better said: channelling) the market scope will deliver more business speed and volume. Therefore the business groups in the first one or two years will be mainly focused on AAA large corporations. As those have long, stable, voluminous credit records that could feed the supply chain model.

Orders that don't fit into the supply chain finance model will not be achieved. We just can't serve them (yet). We first have to build by sales profit equity for funding non debtor bounded aka free supply chain flows. Even as the customers would pay cash, we still have to finance the sea time from ordering to delivery.

We will target in the first one or two years mainly those 'AAA' market parties:

- large retail chains
- large wholesalers
- large corporations

But other parts of the market are also possible if we make them 'AAA' by placing a proxy between then and us. So we will also target demand by the use of an AAA financial proxy as downstream intermediary. By doing this we can serve the whole market demand. By doing this we can use media exposure in an affiliating model (with direct delivery).

- small companies that want to purchase their solar equipment in a lease model
- households that wants to purchase their solar equipment in a finance model  $% \left( 1\right) =\left( 1\right) \left( 1\right) +\left( 1\right) \left( 1\right) \left( 1\right) +\left( 1\right) \left( 1\right) \left($

The AAA characteristic of the financiers of those groups of customers will make those orders possible too. As by their credibility this turnovers streams fits (by proxy/indirect) in the supply chain finance model too.

Starting in 35 nations by taking the retail chain sales as first easy voluminous turnover target. Media affiliating (financed sales to companies and households) will grow out of the retail chain exposure. Both channels don't demand by us paid exposure (both are examples of third party driven marketing).

Direct sales by media affiliating exposure deals will have somewhat higher prices than retail chain sales (as channels never may hurt each other). But they have interest free period that corrects

that price invisible (the extra margin pays the interest): Interest and/or amortization free period of 2, 3, 4 of 5 years (depending on the market approach of the financier and the margin demand of the exposing party).





#### Introduction

Our first concern was a) making the product price right (solar power cheaper than grid power) and b) making the product configuration right (easy to understand, easy to install). As we knew if we fix those items the demand will be overwhelming and sales will not be an issue. Than it goes fast into the millions of kits and as a kit has a sales price somewhere between E 826 and E 1250 (depending on the sales channel): fast into the E billions of sales.

We did this by making easy to understand and easy to install 1000 PeakWatt solar kits, that could be used by anyone within one day, which deliver solar power price levels lower than grid power. So we go even further than grid parity: we make solar even cheaper than grid power. And while doing this still making a good 47% of purchase price aka 32% of sales price margin to build the organization sustainable worldwide. Attractive and easy access to solar energy for everyone everywhere is the concept.

As by this approach demand aka sales is no longer the issue. When sales is no longer the issue, than automatically supply becomes the next barrier to take aka an issue. We you deliver something everybody wants, the demand will me more than you could handle by conventional means (regardless any equity level).

Therefore we needed a way to channel the demand in a way a) we could handle financially and b) without any supply interruptions. So we needed to design the best way to start. We had to find a way to be able supplying in large quantities (millions) of solar kits (aka large financial quantities) in no time without any supply interruptions (which would damage the business).

Connecting to a supply chain (upstream and downstream) finance provider is a crucial part in solving this problem. But it would be fixing only the flow, not the start stock nor the stock buffer needed for large scale direct sales (as orders had to be delivered within a week of so).

But no supply chain financier ever will be willing to put upfront the cash for thousands of containers solar panels without order that will cover that purchases. And no supply chain financier will get any assistance of manufactures too. And no supply chain financier will gain support of the governments of exporting countries (for guarantees and finance) too. They will only do that if the sales will be there

How to fix this classical chicken/egg dilemma? We also had to mould the roll-out model in a way that orders will be present before ordering by the manufacturers. As only that enables limitless growth with the use of standard financial services like supply chain finance (purchase finance, stock finance and debtor finance).

We fix this chicken/egg dilemma. How we did it? We focus ourselves in the first 1 or 2 years mainly on order flows that are backed by (direct or indirect: this we explain below) external credibility. Aka: we 'import' the credit ratings of third parties into our business case. This 'import' of credibility feeds our supply chain finance model and makes the supply 'engine' running.

Direct import of external credibility: When the orders come directly from corporations that a) are big in size, b) have a long credit history, c) have a stable/positive credit history and d) order big orders, than these orders have value as raw material for a supply chain finance model. Supply chain financiers can make orders of such market parties into a financial round supply cycle.

Indirect import of external credibility: When orders come from a divers range of companies (or even households) direct import of external credibility is not possible. But that can be fixed. When the sales towards this wide variety of customers is done only by finance arrangements than the

financiers of these arrangements step in place and deliver their credibility towards the supply chain financier regarding those orders. Than once again supply chain financiers can make the backing of the orders of such market parties into a financial round supply cycle.





#### Start Model

As described earlier we build our market approach around five financial models': 1) direct import of third party credibility, 2) indirect import of third party credibility, 3) isolating the stock position for delivering maximal stock finance security, 4) isolating the debtor position for maximal debtor finance security and 5) making all turnover related costs total variable/flexible.

All the here later on mentioned channels/exposure (combined with the low price, easy kits and cheaper than grid power) will generate quite a voluminous turnover flow. A volume that can not be financed the traditional way based on (always anywhere limited) own equity. Making solar energy cheaper than grid energy will deliver not to handle by own equity levels exponential growth figures/graphs. There's no way to deny that, let's finds ways to channel/secure it and by doing that make it possible to do.

Another finance model is needed. There is no other way to build any business in any exponential growing (in plain english: exploding) market segment, as by the 5 above mentioned financial models. The foundation of the whole business model is 'importing' third party credibility. Direct and indirect. Let's explain this foundation more specific.

Regarding to direct import of external credibility: We do this by starting with a focus on the retail chain market: they are well-known creditable voluminous debtors and their orders can be the foundation of the break of this chicken/egg dilemma described earlier. Later on we will start also other sector units that service also large corporations that could deliver direct import of external credibility. But in the first phase we focus on the retail chains.

Regarding to indirect import of external credibility: When the retail channel is gearing up our concept will become well know. If that's the case we start up our second focus (as we need first the concept/corporate name build that the retail chain sales delivers for this): sales by media affiliating. What is media affiliating? Media runs advertising and don't get paid for exposure (like they used to do), but for incoming orders by their exposure (ads and banners: which we can deliver to them). The concept and the technology involved will be explained further on. Do these direct orders of smaller companies and even households ruin the earlier described supply chain finance model? No it don't. Why? We only sell in this channel kits that are financed by third parties. So our debtor is not the ordering company/household, but the financial who delivers the finance to the customer (company/household). So we have an 'AAA order' once again and this fits the supply chain finance model we needs. When reserves are build up further we can start to do affiliated/channel 'direct' sales to companies/households without third party user finance too, but to get their we need to do the with third party user finance model first, till we got enough stock positions in the harbours of destination to be able making sales without having a third party financial who delivers the 'AAA credibility' towards the chain supply mechanism.

Direct starting with the media/channel affiliated 'direct' sales to endusers of solar kits financed by a third party financier is also not possible as we need to build the digital engine to handle this exposure, affiliating and finance data streams first. Realizing this engine is a home game for Graafland (who has been involved in building many ecommerce engines for quite a while)

The choice for first starting with sales/distribution by the retail chains will deliver:

- a) voluminous (third party paid) exposure
- b) voluminous sales
- c) global startup: the possibility to start in each nation of the world instantly
- d) build up the stock buffers for getting into the next phase (direct cash sales without AAA proxy)
- e) building up national units

All the 5 needs answered in one package.

Delivering a voluminous equity accumulation feed by the profits on all voluminous turnover in each nation too. This equity will make further exponential growth possible. As due to the chose

corporate structure (goal focused, not shareholder focused) all profits will stay in the company. Something the financiers will like (as the company get fast 'much meat on the bones').





#### **Turnover Finance**

In a model that will experience exponential growth the key for it's success is in it's capability to handle this exponential growth. Organizational and financial. Handling this organizational is not much of a problem (as we just import and repack goods: we don't manufacture). Handling this financial could be a problem if the model is not well design to meet this exponential growth demand. This is why turnover finance is at the core of our model.

The key for handling exponential growth is keeping the whole turnover flow in the realm of external securities. If this is the case than exponential growth can be handled at any level. Than the number of digits don't impact the model function. We designed the finance model that way: products never leave the realm of external security until they are paid. This simple rule makes the factor size to unlimited.

The needed turnover finance can be divided in upstream (from order by factory via shipment till putting them in bounded warehousing at a destination sea harbour) and downstream (from bounded warehouse by delivery and instant payment or delivery and invoicing and delayed payment or delivery and payment by finance/lease partner).

The upstream finance can be realized with use of Chinese governmental support. China (like any other nation) has export guarantee and export finance facilities that can be tapped/used/utilized. This upstream finance be done in four ways: 1) using a state owned company as central contractor (the 100% state owned CHTGC wants to act is such way, of course this will increase the cost price as there an extra partner put into the chain, but on the other side: they will act as a giant flywheel that keeps the 'engine' running fast/stable/voluminous), 2) letting the suppliers that has direct access to and experience with this facilities handle it, 3) setting up a branch office in China to handle this and 4) a balanced mix of those three options (ruling out single point of failure somewhere in both the supply chain and the upstream finance chain).

The downstream finance is about a) businesses and governments who want to pay by delayed by invoice, b) businesses and governments that want to finance their solar investments and c) distribution chain finance (towards resellers). It could deliver the finance company who handle it huge turnovers, with ditto profits, interest income streams and new customers for other products (like EV for example) too.

So we start with selling to the retail chains worldwide for the reasons mentioned/described earlier. As by doing this all debtors will be big large AAA retail corporations with a long credit and voluminous credit history. Orders of these AAA corporations will be the core of our Start Model. These orders will give us the possibility to pull the credibility of these giants into our business case. Orders of AAA corporations will open the door for a supply chain solution. Not only for the purchase of these orders, but also for building a stock position that shortens the supply lines.

Let's look at the order/finance process. We get order from the retail chains. The supply chain financier turns these orders into their financial backing for the purchases. They do this with or without the help of manufacturers, with or without governmental export guarantees and with or without governmental export finances. So far so good. Every supply chain financier will be happy to service this. Not for use or who we are, but just and only for the AAA characteristics of the large corporations that order with us. But we want/need more: we need to order the stock for the orders of next month too.

As supply lines are long (for example shipping China/Europe only already takes approximately 30 days) there's a need for building a stock buffer in the demand markets to be able to deliver new orders within one week instead of within two months (as that will be the case if ordering/shipping is part of the process). We need stock in harbours of the demand markets. That's needed to get no supply interruptions as the manufacturers are 30 days of shipping away (aka the supply line is long



in time). For realizing these buffer stocks we need the help of supply chain financier also. They do this once again with or without the help of manufacturers, with or without governmental export quarantees and with or without governmental export finances.

Lets follow just one chain order in this process. An order of a retail chain with 100 outlets that orders 160 kits for each outlet as they will put the product into their current marketing efforts (national leaflets, website, newsletter and other advertising), plus will use the in-store marketing kit and will use the out-store marketing kit (with a huge store banner in it). These in-store and outstore marketing kits will be delivered by each truckload order of 160 kits per outlet. The order of this chain is  $100 \times 160 \times E$  826 (retail kit purchase price of one solar energy kit) = E 13,216,000 ex. vat if the order goes fully though the retail chain head office and  $100 \times E$  132,160 ex. vat if the orders are invoiced to the outlets directly. The debtor(s) are very ok. The supply chain financier does his job. The orders are purchased, shipped, repacked in kit boxes, delivered and invoiced and later on (mostly on the 60 days moment) paid. The initial orders may have longer order-to-delivery times as the marketing templates need to be processed into the retail chain marketing process. But this is only the initial order. The retail chain (aka their outlets) will place recurring orders based on checkout data.

These recurring order flow is why the business model will have exponential growth. If each month an extra 10 retail chains worldwide are serviced, the retail chains that are serviced already will also order their recurring turnover flow. If the initial order is 160 kits and the monthly sales per outlet will be 160 too. In reality the number of recurring sales per month will be higher, as 1 sold solar kit generates demand for more than 1 solar kit more, as the neighbours are discussing it directly due to the sales of that 1 solar kit earlier. So not only each new retail chain connected will ignite the exponential grow further, also each sold solar kit will. This will lead to hockey stick like sales graph that are not that easy financial to handle.

These recurring orders need shorter order-to-deliver times than the initial orders (as the marketing engine of the retail chain already is running). Here comes the need for local stock as mentioned above. This (also exponential growing) stock demand is the second financial challenge that needs to be addressed, and which can't be addressed by ordinary equity based mechanisms.

We can break down this calculation back to one kit to make to make this local stock issue clear in the financial context on micro level. A retail chain orders n (a number) kits at the E 826 price level. This is an order of an AAA company with a stable and voluminous credibility record. So it's suitable for supply chain finance. The purchase price on kit level is E 560. When the supply chain financier is offered the extra securities/collaterals as described below they will go more far than in regular cases without those extra securities/collaterals. This E 826 order value therefore can be translated to order purchase E 560 and an additional stock purchase of E 826 – E 560 = E 266. E 266 is 47,5% of E 826. So the supply chain financier can translated the order value of 1 kit towards the purchase of 1.5 kits if funding 100% debtor amount. So the debtor facet of each order delivers the financial capacity to order also an 50% extra for stock building in the harbour of the same nation (if 100% debtor value is used in the supply chain finance model).

This 50% stock for next month surplus percentage out of the debtor amount changes to 75% if VAT will be added to the invoices. As invoicing party we should of course consider to deliver the products out of bounded warehouse without VAT charged. Charging VAT is just acting for free as a governmental tax collection unit. But there's an upside to this: the debtor invoices will be higher. So as we use a supply chain finance provider, we could use the VAT on invoices also as extra security in the field of debtor finance. Broken down again to just one solar kit this delivers the following numbers and percentages. E 826 ex. vat plus E 176.43 as 21% vat delivers an invoice price of E 999.46. E 999.46 invoice amount / E 560.00 purchase price total delivers the possibility of 79% extra stock for the next month aka recurring order. Of course this only works if the national or regional tax authorities in or of the nations of destination will deliver for VAT payments a payment term (with or without a secondary and partial in percentage cession on the sales invoices after the cession towards the debtor cession delivered to the supply chain financier's debtor finance unit). So if VAT must be charged on invoices, the 'initial order to local stock for the recurring order of next month' ratio will become 1000/560 = +75%.



For those who say: 'It is not rational to expect 100% finance on debtors.': There are some facets that must be emphasized: 1) The debtors are of very high quality. 2) The whole finance amount will stay within the realm of the supply chain financier and the supply chain financier. 3) The supply financier gets also the stock collateral (aka what's purchased for the finance) as collateral in direct cession. This extra stock also has a value and can thereby can be used even to increase this '% extra stock for the recurring orders of next month' part in the supply chain model. By the ex. vat ratio of +50%, the supply chain financier gets 50% of E 560 aka E 280 extra stock security in their realm (is 34% of the E 826 ex. vat amount). By the in. vat ratio of +79%, the supply chain financier gets 79% of E 560 aka E 442.40 extra stock security in their realm (is 44% of the E 999.46 in. vat amount). This makes 100% finance on debtors even low (as it delivers an additional collateral on extra stock). Supply chain financiers understand this (as it's at the core or their business model).

On top of that the export guarantees and export finances of the combo manufacturers and their governmental facilities will kick in. That's needed too, as stacking securities always makes business based better. The cooperation with / between the supply chain financier, the manufacturers, their financial relations and their governmental export guarantee structures and their governmental export finance structures we will be able need to widen this initial order to recurring stock ratio to at least 100% or even 150%.

As this is an exponential growing model the upstream (importing) part of supply chain finance will stay needed always (aka as long as there's an exponential growth curve). Only than we will be possible to meet any demand overnight from own local stock positions. Manufacturers could speed up this by providing stock in ports of destination. Governments of manufacturers could help the manufacturers in doing that. We could supply both manufacturers and governments a steady voluminous demand for their products.

As this is an exponential growing model the downstream part (customer stock finance) of supply chain finance will stay external handled always. Factoring of debtors will stay external handled always. We will use our equity for entering new markets. Leasing of solar equipment for companies will stay external handled always. Financing of solar equipment for households will stay external handled always. We will never have the equity to finance this, nor we will have the ambition to become a solar energy focused financial. We think the supply chain provider is the right partner for taking care of this mainly financial specialisms. We never want to phaseout those upstream and downstream financiers (as they are specialists in those areas). We think that it's good for the business model to have an outside partner on finance. We think this delivers an extra layer of risk prevention.

As mentioned in our contacts with supply chain financiers:

- we're willing to sign a cession on debtors
- we're willing to sign a cession on stocks
- we're willing to sign a cession on insurances
- we're willing to pay the interest for manufacturers (for stock positions in demand markets)
- we're willing to pay the interest for export financiers (for stock positions in demand markets)
- we're willing to pay the interest for enduser finance (speeds up sales and liquidity too)
- we're willing to pay the interest for retail chain finance (increase the initial order volume)

We just want to get this thing rolling as smoothly as possible.

By making the above supply chain connections we could start in all nations of the world the same time. As huge retail chain orders are leading the way. All logistics will be outsourced. Sales and control are our jobs. After distribution by retail chains is made up, running and exponential growing other channels will be started. The first target after retail chain distribution is media affiliating (using the media volume of the world).



And as said above in the frame of exponential growth: the very powerful user delivers users mechanism will kick in from the first sales on. Solar is visible and therefore each solar installation is also a preacher/marketeer. This is why solar will grow not gradually, but exponential: each installation will cause a certain new installation demand. The ratio of this delivers the exponential facet that solar will hit.

There's already done work to get the Chinese financials, the Chinese export guarantee structures and the Chinese export finance structures in-line with this model. Those together will shorten the capital demand supply chain finance significant aka can work sublime together with the chain supply financier.

For businesses there could be a lease model developed where they are offered a delayed payment arrangement. If the supply chain financier don't want to use it's own liquidity for this, such arrangements could be financed by China's export finance arrangements. The two big questions in this realm is who pays the interest and what will be the interest rate? That could be the customer or the vendor (aka us, out of the margin). The administration could be done by the sales engine, so the financial could have no work of it at all if they want it that way for cost reasons.

For households there could be a lease model aka a payment arrangement developed too. In this case an on households focused retail bank should be involved. It could deliver a retail bank a load of new customers with a profile they are willing to service with additional services.

For the supply chain financier getting more on the Chinese market (powered by Chinese capital) could be an additional motivation to become the supply chain financier of this solar roll-out model too. An other argument is that this solar distribution model will be rolled out in many nations and it will give volume in all these nations.

As said earlier: Delivering a voluminous equity accumulation feed by the profits on all voluminous turnover in each nation too. This equity will make further exponential growth possible. As due to the chose corporate structure (goal focused, not shareholder focused) all profits will stay in the company. Something the financiers will like (as the company get fast 'much meat on the bones').



#### **Customer Finance**

Customer finance is also called downstream finance. Downstream finance has three main facets: Factoring (companies as short term invoice debtors), Chain supply (financing stocks in retail chain outlets for retail chains) and Leasing/Finance (medium term -1 till 10 years- amortization of an investment).

As described earlier 'large AAA debtors' are the first sales target group. Those can be searched direct in the global market, mainly as the large retail chains. But by proxy much bigger parts of the global can become 'large AAA debtors', even small businesses and households: just deliver them only financed and the financial will be the 'large AAA debtor' in their place by proxy.

So solar kit equipment lease (for companies) and solar kit equipment finance (households) makes it able to service those markets in the start phase too: the financials that finances these sales are our debtors.

We will gathering these orders are offer them to the supply chain financier in our digital engine. If this will be DLL of Rabobank, than they can offer access to these requests (with the needed data enrichment done by the engine, things like governmental data checks, credit rating data, etc) to their business lease unit (DLL or Rabobank or Rabo Direct) or their consumer unit (Freo or Rabobank or Rabo Direct).

It's better to plan this together with the supply chain financier and the to them connected business lease and consumer credit units. Than our sales can be used to deliver them new customers of a certain profile they want in certain nations.

We also can act as proxy to deliver a financial the customers of retail chains and target groups of media as new customers: so we can replace marketing efforts that costs money and deliver fast amount of actual new customers to them who bring money.

We will offer these services virtual branded and with digital profiling based on external data sources (geographical data, credit rating data, etc). The engine even will be able to deliver accounting jobs (like invoices, payment statements, etc) for the interest free period (but mostly the financial likes the customer in their core engine).

We can chose (in mutual interest based negotiating with the financial) to pay the interest of the first 1, 2, 3, 4 or 5 years. When the order come by the retailchains or media channels the margin for us will be lower (due the external margin on the sale) and therefore the interest free period will be more towards 1 year. When the orders come from not margin needed ideological channels (environmental organizations etc) there's more margin on the sales and therefore the interest free period will be more towards 5 year.

Funding of the consumer financier for such projects can also come from China. See our work on Energy Backed Securities. We have promoted the EBS use of reserves in China to the boards of the PBC, CIC, SAFE, SSF, NDRC, etc intensively the last years.



## **Channel Exposure**

Channels are current active large volume third party customer bases that can be used by delivering them easy to easy/implement facilities that make it both simple and attractive for them to explore the huge coming solar market in terms of turnover and profit.

Channels can be both market parties and ideological parties. The only and only characteristic is that they have user volumes: big user volumes. Volumes that can be explored with solar energy.

The standard product offered to all these channels is of course the standard all-in-one 1000 PeakWatt solar kit, as erasing difficult choices in a new area of knowledge is an important part of our solar model.

The standard logistic offered is delivered by special transport to the buyer. Still some channels could demand for several reasons other models. They could demand that the payment flow runs over their checkouts (as they need the turnover in their performance reports). They could demand that the logistics will go by their warehouses and/or by their outlets or demand own branding for packaging and manuals (to benefit to the max of these new development). All this is possible. Payment via their checkouts demands factoring of the turnover for that chain aka outlet. Logistics via their warehouses and/or outlets and/or own branding demands special packaging suitable for that process which can be organized if the initial order volume is big enough. Packaging of solar kits for logistics by their own warehouses/outlets can be done in just their own original manufacturer pallet packaging (lowering the price, but than the client in the outlets should pick a kit (4 solar panels, 1 inverter, 1 mounting kit themselves) or in special boxes that holds all components of a 1000 PeakWatt solar kit all together (increasing the price with package and packaging costs).

We offer channels an instant access to the solar market. Instant can be read as just in one day. Something the can never realize themselves in such a short time. This is a huge spec of us for them. Of course we will lose some channels later-on as they start to do their own purchase, but that would be sign that we did not a good job in servicing them the right products, the right prices (aka our purchase prices and costs will be too high: two things we don't see happen due to our full solar volume focused model), or the right services.

Some channels will not prefer direct or later-on only the standard all-in-one 1000 PeakWatt solar kits and will demand product separation in ordering. That's no problem: they can order as much pallets of panels, number of inverters, different than the standard types of mounting material, cables, etc. they want. As we have the best stock position, the best price, the fastest delivery and the widest payment schedules to offer them.

When the market channels starts to understand that solar power has a lower price than grid power it all will go very fast: they all will want a piece of the action and will be very open for the instant channel solution we offer them, just as the user will jump on solar as soon that they understand that solar power has a lower price than grid power. This solar momentum has arrived now. Solar is no longer ideological only, it's just economic too, that's a/the game changer.

Another external major development that will solar a huge windfall is that due to digitalization sector barriers are vanishing rapidly in the economy. Exploring the customer base with out of the core sector products is growing rapidly. Banks are getting telcos too. Telcos are getting banks too. Retail chains are getting insurers. Etc. Etc. Etc. For existing sectors this development is growing steady but gradually. For new economic sectors aka new economic products this go different. For those products there are no sector barriers at all. Every market/user volume base will be able to explore this new product group, certainly if they are facilitated by marketing material and digital structures in such way that they can do it instantly with less or almost no efforts. Solar will become the first full cross sector product in the world.



The offer/slogan the market and/or ideological channels will use is 'one year free energy' or 'two year free energy'. The calculation behind this will be that the customers gets an E 250 discount (if the commercial channel wants to earn E 250 on the order) or an E 500 discount (if the ideological channel wants to earn E 0 on the order, or the commercial channel wants to use their margin for a 'win solar' marketing campaign) calculated from the advice sales price of E 1750 inclusive VAT and a channel purchase price of E 1250 inclusive VAT. The relation with a year free energy is due to the fact that 1000 kWh per year costs 1000 times E 0.25 = E 250.

Another marketing slogan/campaign for the market and/or ideological channels could be 'win a free solar energy installation'. The handling of the this campaign (both technological and legal) could be outsourced to us. The win model and ratio too. The campaign and the to win solar energy installations could be paid out of a margin reduction for the channel, so it could be a cash neutral campaign for the market/ideological channel (in a way it don't hurt the factoring contract as the debtor stays a debtor and don't become a creditor too).

Another marketing slogan/campaign for the market and/or ideological channels could be 'bye oil – hello sun' and for the ideological channels also 'make a change now'. Both labels will be available as virtual brands too.

The main/key concept of channel exposure (and attached sales) is selling easy solar energy kits as opportunity to any large user volume anywhere in the market and society as that delivers multiplying of efforts, as that enables huge third party marketing/exposure and thereby sales. It's about convincing the operators of any user volume in the market and society that being a part of the solar investment wave aka solar energy transition is good for both them and their customers aka relations.

The method used to ease this conviction decision of these large user volume operators is making is easy for them too. Facilitate them in a way that they just can order the management layers below them to use this original material in their current period marketing efforts/volume or in special marketing campaigns if that's what they want for sales reasons or for strategic/other reasons. The transactions are handle by a virtual branded online sales environment. Starting this environment is as easy as making online an account and uploading a logo. Them a channel is ready for solar sales. Than just voluminous exposure towards this location (theirsitename.com/solar or energyindus.com/theircompanyname, or byeoilhellosun.com/theircompanyname, or macn.org/theirorganziationname if they even are not able to realize the first mentioned location) and the order flow will start streaming. If they want they can use a discount/coupon code in our virtual branded online solar sales facilitating model too.

So selling solar is not more than just collecting orders. The rest is taken care of. Both marketing material as the order collecting online engine are instant available in any brand by use of virtual branding concepts/technology. As the economies in the Western World go somewhat sour, most sectors will welcome a new revenue stream enthusiastically, certainly if the don't have to do much for it beside exposing solar to their current customers. Marketing departments will certainly like to have a reason to communicate with the customers, as that always enforces the whole core business model of their companies. Companies with salesmen also very much want a reason for salesmen to visit their customers. Solar can be used as their door opener aka visit excuse.

**Hardware Chains** – All hardware chains (like Gamma, Home Depot, Lowe's, Marktkauf, Hornbach, Karwei, Formido, Multimate, Praxis, etc, etc) will be very interested in selling solar to their customers. Not only for the attractive turnover of aka margin on solar, but it's also a way to attract (existing and new) customers to their outlets, customers that will buy more stuff and will come more often. Solar will become a part of their battle for marketshare/customers/outlettraffic.

**Catalog/Online Retailers** – All catalog/online retailers (like Wehkamp etc, etc) will be very interested in selling solar to their customers. Solar will become a part of their battle for marketshare, customers, sitetraffic and outlettraffic.

**Full Online Retailers** – All online retailers (like Kijkshop, BOL etc, etc) will be very interested in selling solar to their customers. Solar will become a part of their battle for marketshare, customers, sitetraffic and outlettraffic.

**Telecom Operators** – Telecom operators (like Vodafone, KPN, T-Mobile, Orange, Movil, BT, etc, etc, etc) both their turnover and operational margin are in structural decline. The big asset of telcos is their millions big customer base.

**Supermarket Chains** – All supermarket chains (like Walmart, Jumbo, Lidl, Carrefour, Aldi, Intermarché, AH, Colruyt, Delhaize, Spar, Tesco, etc, etc, etc) will be very interested in selling solar to their customers and attract new customers. Solar will become a part of their battle for marketshare/customers/outlettraffic.

**Computer Chains** – All computer chains (like Dixons, Paradit, etc, etc) will be very interested in selling solar to their customers. Solar will become a part of their battle for marketshare, customers, sitetraffic and outlettraffic.

**Electronica Chains** – All electronica chains (like MediaMarkt, Saturn, BestBuy, Dixons, RadioShack, etc, etc) will be very interested in selling solar to their customers. Solar will become a part of their battle for marketshare/customers/outlettraffic.

**DepartmentStore Chains** – All department stores (like Bijenkorf, Macy's, Sears, Bloomingdale's, Barneys, JCPenney, etc, etc, etc) will be very interested in selling solar to their customers. Greenwashing, appealing high income people, earning additional revenues, having a reason to communicate with the customers, etc are the reasons they will love solar. Solar will become a part of their battle for marketshare/customers/outlettraffic.

**FuelStation Chains** – All fuel station chains (like Shell, Exxon, Q8, etc, etc) will be very interested in selling solar to their customers. Solar will become a part of their battle for marketshare, customers, sitetraffic and outlettraffic.

**FuelCard Companies** – All fuel card companies (like FleetCard, MultiTankCard, BasicCard, etc, etc) will be very interested in selling solar to their customers. From revenue perspective, from greenwashing perspectives and from market share perspectives. Also the big oilcos will use solar to greenwash themselves effectively.

**Furniture Chains** – All furniture retail chains (like Ikea, Bo, Select Comfort, Jysk, Mattress Firm, BeterBed, Ashley, Rooms to Go, etc, etc) will be very interested in selling solar to their customers. Solar will become a part of their battle for marketshare/customers/sitetraffic/outlettraffic.

**HomeProducts Chains** – All home products retail chains (like Blokker, Kruidvat, Trekpleister, 7/11, etc) will be very interested in selling solar to their customers. They have so many (according to market specialist: too much) outlets and they needs turnover/margin from this outlets to stay in business at that scale. Solar will become a part of their battle for market share, customers and outlet traffic. Kruidvat in Holland (subsidiary of A.S. Watson) is a text book example of this going over any economic sector border: they sell mortgages, insurance, hotel reservations and operate a virtual mobile telco operation. As the economy of Europe no longer grows and is in decline, it's judgement day for retail, those with too less turnover and/or margin will fail. It's a battle out there. Solar is the new ammunition they will use to win this battle of last man standing.



**Office Supply Chains** – All office supply chains (like Staples etc) will be very interested in selling solar to their customers. Solar will become a part of their battle for market share, customers, site traffic and outlet traffic.

**Shoe Chains** – All shoe retail chains (like Scapino, Dolcis, Schoenenreus, etc, etc) will be very interested in selling solar to their customers, as their core business is slowing down and they have build-up huge digital customer bases as their trade is going online/digital in rapid speed.

**Outdoor Chains** – All outdoor retail chains (like Vrijbuiter, etc, etc) will be very interested in selling solar to their customers. Solar will become a part of their battle for market share, customers, site traffic and outlet traffic.

**Weapon Stores** – All weapon retail stores are crowed by people who has their autarky very high on their agenda. Therefore weapon stores will be very interested in selling easy solar kits to their customers.

**Photo Chains** – All photo/video station chains (Dixons, etc, etc) will be very interested in selling solar to their customers. Solar will become a part of their battle for market share, customers, site traffic and outlet traffic.

**Optician Chains** – All optician chains are somewhat in dire straits: there are too much chains with too much outlets towards a stable and only slow growing market. Offering people a new product (under the cover of being green) will deliver them a) customer contact, b) customer approval, c) shop traffic, d) core business turnover and e) solar turnover/revenues.

**Clothing Chains** – All clothing chains are somewhat in dire straits: there are too much chains with too much outlets towards a stable and only slow growing market. Offering people a new product (under the cover of being green) will deliver them a) customer contact, b) customer approval, c) shop traffic, d) core business turnover and e) solar turnover/revenues.

**Outdoor Chains** – All outdoor chains are somewhat in dire straits: there are too much chains with too much outlets towards a stable and only slow growing market. Offering people a new product (under the cover of being green) will deliver them a) customer contact, b) customer approval, c) shop traffic, d) core business turnover and e) solar turnover/revenues.

**Airline Operators** – All airline operators (like Ryanair, Air France, Lufthansa, Air Italia, Air Lingus, British Airways, etc, etc) will be very interested in selling solar to their customers, as the profitability of their core business (air travel and air transport) declines more and more. As the CEO of Ryanair Michael O'Leary tells when he explains their business model: "getting customers is the first job, channelling as much of their purchase through our companies is the next job". Ryanair thanks their operational group profit complete to hotel reservations, credit cards, mortgages, insurances, perfumes, etc, etc, as their flying operations just are designed not to lose money and not to win money. Being able to sell to their millions large travellers base solar will be very interesting for them, as the sales fee is attractive (E 250 per kit) and they have any work at the order handling what ever.

**ShoppingMall Managers** – All shopping mall management companies have huge problems with empty / not rented spaces within their malls. This reduces the attraction of the mall severely. They have to address that without lowering the price too much (as than they go broke for sure). They do that by mega stickers on the windows of empty shops with nice images or advertising. We offer them an turnkey solar point of sales solution for their operation. All shopping mall management companies will be very interested in selling solar to their visitors. The need the bucks to get floating in those severe times of sharp decline in consumer spending.



**Corporation Employers** – Large corporations are searching for ways to greenwash of (aka: attitude change for) their employees. This as both the demand markets (value adding) as the financial markets (long term strategic bondholders) demand sustainable directions of corporations. Offering their employees our solar kits is an easy plug-and-play attitude change communication tool for corporate boards.

**Housing Corporations** – Housing corporations (semi governmental housing operators) are early adapters aka frontrunners in change. They all want to get involved in all facets of housing (and certainly in the energy facet of each household, as that can be done complete virtual). Housing corporations just needs tools/models that are a) full economic and b) full plug and play. In Holland there are housing corporations that own somewhat less than 100,000 houses. They have a lot of roof space. They can offer the tenants a joint tenants deal where they a) they are the contract partner or b) the tenants are the contract partners. In case of b) they can offer to be the collector of the contract payments (as they have already an invoice relation with the user) and by that 1) earn some income and 2) make the finance rate very cheap (as the financial don't have any administration costs at all). If a corporation with 90,000 houses communicates a solar offer to its 90,000 tenants, this will deliver a flood of orders.

**RealEstate Corporations** – Commercial real estate companies in the Western World currently don't have the time of their life. They are confronted with a sharp decline in demand and therefore with a demand dominated market that ruins their turnover as the costs stays almost at the same level. They need new tricks to attract new tenants for attractive aka get attractive rental fees. Solar (besides fiber) will become a huge weapon in the battle for tenants. As companies (aka tenants) want to greenwash their operations (aka buy a modern/actual imago) by solar.

**Components Suppliers** – All component suppliers (like Farnell, RS Components, etc) will be very interested in selling solar to their customers. They are too wide in product range to get specialized in solar, so they will buy solar local. We'll be glad to serve them (and thereby their huge customer bases).

**Energy Companies** – Energy companies (like Dong, Electrabel, Greenchoice, EnergieDirect, Oxxio, etc, etc) are interested in investment free decentral production. Why should energy companies want to sell solar (as solar would reduce their turnover)? The answer is simple: solar will reduce their turnover, but increase their profits. Why? Solar delivers power in that time window of the day that purchasing power is the most expensive aka in the that times of the year (summers) when purchasing power can be extremely costly. It reduces their purchase on high price time windows aka deliver them excess capacity that can be sold in high price time windows (like summers, when many power plants only can functioning on half capacity due to lack or cooling water capacity in the rivers). It also delivers the new retail companies on the power market an instant order profit which they need very much as getting new customers is very expensive in terms of marketing and customer convincing give-ways aka discounts.

**Consumer Brands** – Consumer brands always are searching for way to profile themselves towards the customer and towards their competitors. Offering a discount code/campaign on solar is the right way to a) profile themselves as an actual  $21^{st}$  century brand and b) greenwash the brand. Marketing guys/girls are always on search for new actions to be able to make campaigns and/or getting attention on the POS (Point of Sales) aka supermarket shelves.

**Banks** – Banks certainly want the money that now flows to energy companies as interest revenue. And that is possible. We can facilitate them by this process. Direct (by/for their account) or indirect (by/for another bank's account, virtual, invisible for the clients). The turnover and profits delivered by solar are needed for banks as they face some head winds on almost all other sectors, they need a sector that can grow and deliver turnover and margin.

**Lease Corporations** – Lease corporations their turnover in the Western World is declining (as the economy in the Western World is declining). They have huge expensive organizations and need a new product group to deliver turnover aka profit to be able to contract gradually to the new normal

level. They also need the profit of a new product to cover the loses caused by declining sales prices of used cars/trucks (which could turn each existing lease contract sour). Solar is a gift from heaven for lease companies. It gives a whole new product sector to them. They will market it intensively and use it to get new customers too.

**Insurers** – Insurers have large customer bases. Their core business models are under pressure a lot. They certainly like some extra revenues, certainly in a model that also increases the revenues on their core business. Promoting solar is automatic getting higher turnover aka note adjustments for insurers.

**Pension Funds** – Pension funds are searching for secure investments as they have experienced huge haircuts on all fronts the last years. Pension funds are also searching for ways to deliver their customer base future income security (which is their core business). In this light pension funds could be interested in offering their customer base solar (as it is completely in-line with their core business model and they could avoid not payment risks as they are the debtor of their customer base). In the current bad PR weather for pension funds, solar could deliver them a nice PR twist, aka change of tone of voice, aka change of mindset, aka re-ensuring towards their customers that they are on their side regarding their future perspectives. For pension funds promoting solar energy is a huge/splendid PR item/case.

**Local Governments** – Local governments all have energy transition agendas. They want to be the front runners aka early adapters of the energy transition. They don't have to be convinced anymore about solar: they're already pro solar. They just need a financial model. We will deliver that to them. They will install solar. They also will promote solar. Some of them have sold recently their shares in cable companies and/or energy companies. Some of those use the capital acquired by those sales to finance solar for there own building or even for offering solar credits to new solar users.

**Regional Governments** – Regional governments all have energy transition agendas. They want to be the front runners aka early adapters of the energy transition. They don't have to be convinced anymore about solar: they're already pro solar. They just need a financial model. We will deliver that to them. They will install solar. They also will promote solar. Some of them have sold recently their shares in cable companies and/or energy companies. Some of those use the capital acquired by those sales to finance solar for there own building or even for offering solar credits to new solar users.

**National Governments** – National governments all have energy transition agendas. Importing energy fuel is exporting wealth on a daily base. Importing energy is being independent and therefore always in the shadow of risks. Importing energy is maintaining high expenses on both state department and defense department.

**Supranational Governments** – Supranational governments (like the EU) are very focused on issues like energy transition as they search for fields where they can prove the need for their operation. They will be front runners in solar, certainly as solar has become economic and they want to air this message as front runners in their own overall interests. The need the solar = economic message very hard.

**International Bodies** – International bodies a) have energy transition agendas, b) are voluminous, c) want to set an example and d) are well funded. They like solar. A lot. But it needs to be economic. Like we have made it. They will buy. A lot.

**Development Organizations** – Development organizations likes some luxury for their employees. They certainly will like solar for all their off grid global employee presence locations. But also for their on grid locations: they like the preach change by this.

**RoadManagement Companies** – Not all ways has an own power grid beside it. Road management companies are therefore very interested in solar+battery solutions for signs, toilet buildings, etc, etc. For the same price as an initial grid connection they have life time free energy for that device.

**RailStation Operators** – Rail station operators are very much interested in power redundancy towards grid power by having an own emergency power feed from solar during daylight times. Rail stations are often operated by one national organization. So one organization could decided for all the rail stations (which has huge roof surfaces). As each day many people pass railway stations, PV on rail stations will make PV mainstream.

**RailWay Operators** – As railways are installing both internet services for their travellers and security surveillance systems along their tracks they need huge numbers of power connections. They have the choice for power from their own grid of solar, or –and that will be their preferred solution- power redundancy between own power grid and solar+battery. Redundancy is the keyword for infrastructure design for the coming decade.

**PowerInfra Operators** – Power infra operators have control equipment on remote locations and the number of such equipment locations is still growing exponential due too better control demands. On that locations there's often only very high voltage power available. The will like solar/battery solutions are cheap and steady power supply. Certainly on rural tower locations they rent out for installing telecom equipment. Currently they only offer these high level mounting locations, they certainly like to offer high locations plus power supply.

**TelecomInfra Operators** – Telecom operators are at the start of the roll-out of the new G4 networks. High frequency networks needs smaller cells (as the high frequency signal don't travel so far). Telcos will need a lot of new cell points with power supply. Solar/battery solutions will deliver them life time power at the initial grid connection costs.

**OutdoorAdvertising Companies** – Outdoor Advertising Agencies need a grid power connection on each advertising unit of them. Installing a solar unit with battery power is much more cheaper for them. For the same price as the initial grid connection they have a device long power aka device lifetime no power costs.

**Consumer Organizations** – Consumer organizations are suffering of the product information and product critics delivered by the internet. The internet has made them for a huge part obsolete. As they can't offer not that much USPs (Unique Selling Points) anymore, their revenue streams are declining in rapid speed. They missed the privacy movement demand out the market (for a lot of people/consumers a big issue). Another facet is that people are not that much membership focused too anymore. They are trying to re-invent themselves by transition to group deal like organizations.

**Groupdeal Organizations** – Groupdeal organizations (like Groupon, Groupdeal, etc, etc) are very interested in selling solar directly to endusers with the same discount and for the same price and with the same margin as retailchains will do.

**Book Clubs** – Book clubs are going down the drain. All of them. Their time is up. Times have been changing. Not for the better for them. The two big things they still have is a) a huge (former) customer base and b) a well known brand with a long history. They certainly will use solar to extend their life line with just another year of two.

**Energy Colporteurs** – In nations where the energy market is liberalized there are many huge/voluminous energy colporteur companies operational. Their business model is based on the E 70 switch fee they get when their employees convince people to switch to another net power supplier. These organization will love (in capital and with dots between each character) to have a

solar product to offer for their employees which will deliver both them and their employees a higher fee. If the penalty on fake orders is high, they will supply only a little fake orders (as their head offices will verify each order throughout than).

**Labour Unions** – Labour Unions are bleeding to dead all over the world. Their demographics are relative much more grey than society. They need new models to get back in the middle of the economic process by attracting more young demographics. Solar could be such an emergency move for them, as doing nothing is not an option for them.

## **Enduser Cooperatives**

Endusers will more and more make internal cooperatives to realize own energy production. These cooperatives will boost demand significant.

**Environmental Organizations** – Environmental organizations are getting more and more the picture that the government a) will not longer subsidize them and b) nor will subsidize the transition towards solar energy. This calls for a strategy change for them. A change that a) giving them income to run their organizations and b) make the energy transition possible without governmental subsidies. They will love our easy solar model. For all kind of reasons.

**Peace Organizations** – Peace organizations have talked for decades of the bad influence of oil on global peace aka of oil wars. Our solar project will deliver them a way to reduce the influence

**Political Parties** – As the governmental funding climate is getting sour, political parties will search for not governmental budget driven solutions/changes that delivers economic solutions/progress and/or environmental solutions/progress. Our solar model delivers instant such solutions/progress for them. Promoting it can be used by them as example of not governmental, but user/market driven change. Both the far left and far right parties will be the most active on this (as it strangely suites both their agendas).

**Churches** – Churches have played always some roll in rolling out changes. They can chose to make solar to one of their proposals towards their global/organizational/personal stewardship vision.

**Mosques** – Mosques have played always some roll in rolling out changes. They can chose to make solar to one of their proposals towards their global/organizational/personal stewardship vision.

Chambers of Commerce – Chambers of Commerce have played always some roll in rolling out changes within the business communities of nations. Both in nations where there are more governmental focused (like in the Netherlands) as in nations where they're full business focused. They can chose to make solar to one of their proposals as it delivers companies some grid independent power feed (aka operation security) and maybe some will also promote it their greenwashing agenda.

**Business Organizations** – Business Organizations (defending not only trade interests –like the Chamber of Commerce in the USA-, but also production interests) have played always some roll in rolling out changes within the business communities of nations. They can chose to make solar to one of their proposals as it delivers companies some grid independent power feed (aka operation security) and maybe some will also promote it their greenwashing agenda.

**Agricultural Organizations** – Agricultural organizations are following the solar option for quite a long time, as their target group (farmers) has plenty of roof space available is can use a cost reduction and an extra source of revenues for sure. As farmers always needs more storage

buildings and/or operation buildings they are also interested in a modular in size bailey design like (construction on location with no heavy cranes) easy-to-construct type of barn.

**Employee Programs** – Just like in the first days of the personal computer, companies will offer their employees personal solar kits in a voluntary joint purchase model. Delivering the employees the retail discount (aka 1 year free energy, aka 1 year shorter earn back time). Large corporations will be contacted by us first, but on the site any small/medium company will be able to start their own employee solar campaign digital facility. As social and environmental facets every year play a bigger roll in business, we think these programs will be widely used and therefore will deliver huge turnovers.

**Charity Lotteries** – Charity Lotteries (like Postcode Loterij, People's Postcode Lottery, etc, etc) can play a huge roll in rolling out the solar model, aka in promoting solar energy. They could make solar to an important item in their price portfolio. The fact that their purchase price is lower than the user market value is also an attractive facet of solar for them.

**TravelAgency Chains** – Travel agency chains (Like Thomas Cook, D-Reizen, Airtours, etc, etc) suffer a lot of internet only chains (as travel outlet chains have a higher cost level, while they can't add this to the salesprice). They are searching for all type of extra incomes to overcome this gap and stay in business. They sell foreign phonecards, airport valet parking tickets, etc, etc. An interesting proposal towards their customers could be a 'still earn while you're on vacation' regarding solar. The E 250 profit per sold kit is very attractive to them (a fee they don't earn that on their core product in most of their transactions).

**CarRental Chains** – Car rental chains (Like Hertz, Alamo, Budget, etc, etc) are very open to the concept of EV (Electric Vehicles) as they see that cities will force legislation to address the city air quality. Solar energy is therefore something that's already at a certain level in the DNA of car rental chains at their management level. Promoting solar kits would deliver them both income as customer binding aka spreading.

**Local/Regional/National Businesses** – New economic sectors always attracts also new players. Existing entrepreneurs that see the possibilities of a new exponential growing sector and by their attitude/network/infra can profit very easy/fast of the new opportunity.

**International Corporations** – International Corporations always have some headwind regarding their media exposure. They have a structural PR problem. They need positive facets to counter balance the critics they face on their operations. Solar is a huge opportunity for them to green wash themselves big time. International corporations will install solar for other reasons that just energy, they will do it to better their media image.

**Logistic Companies** – As in transport the margins are not that high, transport companies search for ways to enlarge their income. As in our solar model they can play an important role in distribution they can chose to sell solar. An example of a company who act in this way is PostNL: they sells electric bicycles in their webshop while buying a lot of paid exposure towards this webshop. Delivering them both margin on sales as margin on delivery. As they have already a transport infra and are present in each street of Holland each day.

**Export Orders** – Orders out of nations where the model is not rolled-out yet can be handled by the national organization that receives those orders or can be forwarded against margin sharing to the central organization (in case the national organization has no export experience yet in export in genera or in export to certain countries, or their national factoring/leasing partner can not perform to some/all other nations).

**Importers/Distributors** - As solar is getting no longer out of China by air, but now is going by sea to user markets, almost all importers and distributors has supply interruptions (which offer them a higher margin environment compared to a supply regular chain that can meet any

demand). Our model prevents these supply interruptions are will therefore reduce the price of solar with no cost for the manufacturers. Our supply model is also a reason why much of the market will use us as importer/distributor, the more because we will be a transparent supplier with no own branding of our panels and inverters and mounting kits, delivering on a specs/price model and not on a branded model.

It seems double to mention the media here, but bye experience we know that readers of our models don't understand the concept of media affiliating at all (as it is a relative new concept that really started to fly the last years, although the digital technology is available for almost 2 decades). All printed media are in dire straits due to too high duplication/transport/sales costs. All printed media needs revenues like never before, just to keep floating.

**Newspapers** – Newspapers are all in dire straits. Decline of advertising income by the media fragmentation (aka the rise of magazines, radio, television and the internet). We offer newspapers a revenue stream out of solar by offering them instant to use online and print advertising material in several brands and a virtual online order collecting engine. They can start the same day they decide to go for solar with earning by solar.

**Magazines** – Newspapers are all in dire straits. Decline of advertising income by the media fragmentation (aka the rise of radio, television and the internet). We offer magazines a revenue stream out of solar by offering them instant to use online and print advertising material in several brands and a virtual online order collecting engine. They can start the same day they decide to go for solar with earning by solar.

**Site Owners** – Site owners are all in dire straits. They have never earned too much out of their (sometimes very big) loads of traffic. We offer site owners a revenue stream out of solar by offering them instant to use online advertising material in several brands and a virtual online order collecting engine. They can start the same day they decide to go for solar with earning by solar.

**Newsletter Owners** – Digital newsletter owners are all in dire straits. They have never earned too much out of their (sometimes very big) loads of traffic. We offer site owners a revenue stream out of solar by offering them instant to use online advertising material in several brands and a virtual online order collecting engine. They can start the same day they decide to go for solar with earning by solar.

**Television Channels** – Television channels have advertising blocks in the quiet hours they can't sell to anybody. These advertising blocks (and even full airtime) is used for affiliating based advertising/sales. As they don't want to deliver exposure to an existing brand for free, they can have their own brand of solar for this purpose.

**Search Engines** – Search engines have always unsold advertising volume they can't sell to anybody. These advertising space is used for affiliating based advertising/sales. As they don't want to deliver exposure to an existing brand for free, they can have their own brand of solar for this purpose. Google for example needs good PR as counter weight to critical PR. They will love it. Yahoo needs new revenue very hard. Nokia too.

**Outdoor Advertisers** – Outdoor advertising companies have always unsold advertising they can't sell to anybody. These advertising space is used for affiliating based advertising/sales. As they don't want to deliver exposure to an existing brand for free, they can have their own brand of solar for this purpose.

As said earlier at the start of this Channel Exposure section and repeating it here at the end of this section as it is important: We offer channels an instant access to the solar market. Instant can be read as just in one day. Something the can never realize themselves in such a short time. This is a

huge spec of us for them. Of course we will lose some channels later-on as they start to do their own purchase, but that would be sign that we did not a good job in servicing them the right products, the right prices (aka our purchase prices and costs will be too high: two things we don't see happen due to our full solar volume focused model), or the right services.





## **Media Exposure**

Press exposure will only follow if a certain exposure volume first is created otherwise. Only than the press will start to cover it. As it's a new development than the press will cover it intensive. Making the message somewhat provoking the press will cover it more intensive than otherwise.

**Impact** – Any journalist/editor will recognize the huge impact of solar getting economic attractive aka delivering power below grid power prices. It will change the energy future of all nations significant. Journalists/editors will run not one small, but multiple big stories on it. Solar will be a media headline subject for years to come.

**Content** – Media don't much budget for content. This is addressed by making a pool of content accessible for them. Descriptions, concepts, data, statistics, photos, audio, video, testimonials, real life cases, etc, etc. Anything that will help them to produce in short time aka at the lowest cost quality items on solar.

**Interviews** – Of course media often want to talk to someone aka interview someone. That's (beside copy/paste) their most used method of information gathering. Journalists are bad readers. In each nation there will be a press spokes(wo)men who can tell the solar story attractive/informative/passionate without any professional difficult words. In nations with a lot of turnover there will be both a written press and a audio/video spokes(wo)men. In nations with even more turnover these spokes(wo)men will be also appear in radio/tv on location.

Affiliating – All media are suffering from declining revenues out of both advertising and subscriptions. They can use new revenue streams like water in the desert. Solar can deliver it to them. Within the ideological and commercial neutral 'Bye Oil – Hello Sun' label they can find banners, ads, texts, photos, etc to generate traffic/turnover in this new emerging market. The orders will be 'caught' in a virtual branded engine. That their readers/listeners/viewers/visitors can access by medianame.com/solar which will be redirected to a dual or single virtual branded site at energyindus.com/medianame or energyindus.com/id=medianame at their convenience. They don't need to have any technological experience. Anything is handled for them by the engine. Just making an account will be sufficient. They will get a fee for each order. This also will encourage them to deliver a lot for/against solar in the media they operate. Any publicity is good publicity is the PR rule for a new development/brand.

The exposure volume of media is huge. Supporting them by delivering them building blocks and/or contacts is wise and exposure economic very attractive. Using their communication volume in cooperation due to affiliating deals is also exposure economic very attractive. Mobilizing media exposure also delivers a communication wideness aka repeating effect, which multiplies the effects of all earlier and present and future exposure.



# **Installation Exposure**

Each solar installation is a quiet preacher that proclaims solar energy just by being sawn by it's surrounding. Both in installation and by daily existence. It questions quietly everyone who sees it on their opinion on solar energy. This is a huge benefit of an external mounted new product in society aka economy like solar.

But also electrical installation companies, roof installation companies and one-man-companies all want the solar huge load of installation work for households, companies and governments that don't want to install solar themselves, will play a huge part in the installation exposure.

The exposure power of a) actual installations visible on roofs in a neighbourhood and b) these accumulative massive installation people/companies are both huge. Each solar installation is a subject of communication in the neighbourhood of that installation: it appeals and ask silently for an opinion of the viewer. And if the viewer knows the owner: he will talk to him/her on solar too, but the main communication value come by pure seeing the installation. Each solar installation worker is walking exposure device (as they talk to people on/off/over their job). Each installation will also motivate installation workers/companies to do more solar and start playing with that (for example passive by offering some information sheets to anyone who starts talking to them or active by distribution of leaflets in the neighbourhood of by advertising). By these four installation causes solar will grow exponentially.

Focusing on the do-it-yourself type of installation and therefore not openly offering any installation services is smart: it enables the installation market to jump into the product installations for companies and governments: it delivers an installation volume which never can be realized by any own organization. And of course maybe we will offer large corporations and large governmental projects turnkey prices too if the volume is right to do so. But also them we will hire third parties to do the installation. We will never have an own installation group: it's not our core business and we want to stick to our core business: importing, distribution and (third party performed) marketing. We will operate a web engine where supply and demand on solar installation can meet each other. All sales that wants a third party for installation will be automatic visible in this engine.

**Independent Worker** – Solar will be a lot installed by small businesses. The big ones will jump on the bandwagon when it has already quite some speed (and maybe will be too late due to that). Independent workers who has no employees will take major parts of the third party installation market. Of course the independent workers also can order both kits and panels/inverters/mounting kits for their own realized sales. But the beauty of purely installation work for the independent worker is that he/she don't have to invest in the to be installed products: just investing their own time will give them an attractive income. As the real estate building sector is going down the drain as we speak, independent workers will welcome the solar installation boom as water in the desert. They will demand an hour fee somewhere in the range E 25 till E 35.

**Mobilizing Unemployed** – Due to the easy to get work as independent worker in solar installation, there will be a huge flow in of unemployed towards independent workers in solar installation. Maybe first as temp employee and from that to independent worker. The that people a) easy can start their own solar installation business, b) that installing solar is no rocket science, c) that no investments in product stock is needed and d) that the investment in own equipment (drill, ladder, stand, etc) are as low as E 1000 will deliver a huge in flow of new independent workers into the solar market. The choice between earning nothing and earning some hundred a day is an easy one. Also as/while the real estate sector is terminal ill, the solar sector will boom and also hire a lot of temp people/staff, which will offer jobs to the unemployed too.

**Installing Companies** – As the real estate sector is in sharp decline both electrical installers en maintainers and roof installers and maintainers will jump into the growing solar market and make it even bigger. They have already customers and they will try to realize solar work within their customer base, as well using solar to wide their customer base by means of the offered marketing

material the can duplicate. They will realize hour rate somewhere between E 50 and E 80. For many of these companies solar will be the life line and they will use it as so maximal. They will do the bigger solar jobs towards companies/farmers/governments.





**User Exposure** 

The most devoted and convincing salesmen are users. There are no better salesmen than current or wannabee users. Their motivation can be ideological, practical (installing together), commercial (earning a discount on own solar kit purchase) or a mix of all these three.

The ideological motivations for this private micro involvement will be somewhere in a wide spectrum: it can be the environment, energy/prosperity security, anti energy-wars, anti big-oil, etc. People are willing to do things for a better future for themselves, their family, their friends, their community, their children and their grandchildren.

When these efforts are facilitated aka made very easy, than the little effort of many people can have huge volume effects. The beauty of solar is that actually/really something changes. This is a huge/big/giant USP (Unique Selling Point) of installing and/or promotion solar towards all other social, environmental and/or political efforts/activities.

The commercial drive in user communication is that users also can chose to earn something (E 25) out of each order, so besides ideological motivations there also will be commercial driven user exposure too.

**Solar Installation** – The best way people can communicate their solar agenda is by installing it on their roof. The amount of question they than instant get from their neighbours, friends and family is enormous.

**Social Contacts** – Simple by talking with neighbours, friends and family people will get more people that want to switch to solar and install it on their roofs together.

**Social Status** – Simple by typing a single status line on Messenger, Facebook, Twitter, Weibo, Whatsapp, etc will generate direct communication on solar energy with one's own social network.

**Social Message** – People can make own messages on Messenger, Hotmail, Twitter, Weibo, Facebook, Whatsapp, Email etc or resend/forward/retweet/copy standard messages that are listed on message example accounts for special made for them for this purpose.

**Social Account** – People that have decided to install solar together can open a special/dedicated Messenger, Hotmail, Twitter, Facebook or Whatsapp account for their project.

**Social Group** – Within Facebook and other social networks (which are in some nations bigger than Facebook). On the side there's a cross platform OpenSocial environment available.

**Window Poster** – Simple by putting the last page of the magazine (with only the photo of a solar panel on it) behind the window people can find other people to install together their solar kits on each other roofs. People also can order a bigger versions (A3, A2, A1 and A0) of that poster on the website.

**Leaflet Distribution** – Available in Print (can be ordered on the website against print/post/package cost) or in PDF (can be downloaded on the website).

**Outdoor Banner** – People can order banners in all sizes and shapes with all kind layout templates or free content on the side.



**Solar Meeting** – People can organize a meeting with in solar interested people in their home or in the local community center. On the site there are special tools to facilitate that.

Mobilizing and facilitating user driven exposure delivers a wide/deep communication wave of extreme high quality. Person to person communication between people that already know each other has the highest impact of all types of communication/exposure. It's also an exposure method that doesn't require 'fuel' as it 'fuels' itself. It can become the most voluminous exposure method. Many small effects can become the biggest wave ever. Mobilizing media exposure also delivers a communication wideness aka repeating effect, which multiplies the effects of all earlier and present and future exposure.

Users aka people can chose out of several campaign names/slogans for the one that made them feel most comfortable to use. This is possible as the marketing engine has virtual branding as one of the main characteristics.

The ideological drive of people is often underestimated. But when people can realize good things by just a little effort they will do it massively. People are tired of problems they can not address aka on which they can make a difference. Solar deliver them a way to release all this in years build-up tension. Therefore just repeating some lines mentioned here above to emphasize them strongly (as they describe the huge potential aka reserve of user exposure):

The ideological motivations for this private micro involvement will be somewhere in a wide spectrum: it can be the environment, energy/prosperity security, anti energy-wars, anti big-oil, etc. People are willing to do things for a better future for themselves, their family, their friends, their community, their children and their grandchildren. And when these efforts are facilitated aka made very easy, than the little effort of many people can have huge volume effects. The beauty of solar is that actually/really something changes. This is a huge/big/giant USP (Unique Selling Point) of installing and/or promotion solar towards all other social, environmental and/or political efforts/activities.



## **Paid Exposure**

For kick starting the product awareness exposure (and by that massive sales) there are two ways to realize that: creating an own marketing budget or using the exposure volume of an existing large market or non-market party. As described earlier we have chose to do the last, as that's the only why supply chain will work. Still we want to list the Paid Exposure option even if this is something we not will do.

**Leaflet Magazine** – The best way to massive kick start in a nation (or a certain city/region of a nation as narrowed kick start) is the distribution of a door to door leaflet or magazine. This will deliver an instant near 100% proposition awareness combined with a relative high brand awareness, but it's the proposition awareness that counts the most. The text of the leaflet/magazine is a little provoking to kick start target group internal interaction (give them something to talk about) and media exposure (give them something to write about). The backside of the magazine can be used as window poster as tool to mobilize local street solar initiatives. A simple example: In Holland a 6.5 million printing plus distribution arrangement of a 12 pages A4 full color magazine costs only E 227k.

**Outdoor Marketing** – Supporting the Negotiating heavy discounts on 'empty slots' allotments by outdoor marketing companies is also a way to get huge product awareness for E 100k or less.

**Online Advertising** – Negotiating heavy discounts on 'empty slots' allotments by online advertising companies is also a way to get huge product awareness for E 100k or less.

Kick starting huge aka high volume exposure also can be done by channel exposure. Channel parties has also huge exposure volume capacities. The upside of channel exposure is that it don't cost one dime for us. So the sky is the limit in volume and diversity. The only costs are the original materials they will 'seasonized' and branded and duplicate into their own exposure and of course the virtual branded order engine that supports the order flow for them.

## **Digital Engine**

The core all direct (aka non retail) sales is the digital engine. And even in retail sales the digital engine could play a role if the retail chains want to sell PV not only on cash at check out, but on finance too, than they need a plug and play environment in their own brand to facilitate these orders.

For all parties aka stakeholders involved is the availability of the digital engine a dream. It offer them a plug-and-play environment regarding solar sales/finance with their own branding. The digital engine will be another USP in our solarization of nations.

The digital engine delivers a virtual branded solar sales engine to any interested market party in just a matter of minutes. Retail chains, media outlets, unions, municipals, the greenpeaces of the world: they all can have their own solar sales environment instantly.

They just have to open an account on the engine, upload their logos in some predefined sizes and they have their own solar sales environment, which they can publish as solar.theirname.com.or.org or theirname.com.or.org/solar. All hits will be redirected to this engine. The needed redirect settings of file will be emailed to them automatically if they open the account on the engine. Of course the sector unit dedicated to their sector will assist them in all this.



# **Marketing Templates**

Both for retail chains as well for other channels (like media) we will produce ready to use marketing material that could be used instant in all their own communication. No need for first time instruction of marketing departments or advertising agencies: just deliver them the template material and they will integrate it into the own communication/media.

There are templates available for leaflets, online banners, pdfs, email, facebook, advertising, etc, etc. Even for in-store and ex-store marketing their will be poster and banner templates that could be used. So every subject of communication, each store visitor, each store passer-by will see the solar offer: delivering a lot of sales. Starting with solar never was so easy: the right products, the right configuration, the right finance, the right marketing, the right digital engine, the right (external/free) customer help desk, the right warranty handling.

For the media there are templates too: they could start with affiliated (sales fee based) solar exposure instantly (although they can offer only financed solar, due to the supply chain demand of having an 'AAA' between party involved.





#### **Customer Care**

Besides the virtual branded digital engine that facilitates sales traffic in their own branded environment, the channels that will do solar also need a customer support and warranty handling. retail chains and media will not start with solar if the customer support isn't a part of the deal.

The combination of those two services (digital engine and customer support) makes it possible for any channel (even a church or mosque) to start promoting solar and or profit of it, of pass on the possible profit to their targetgroup in the form of interest free years.

It's important that the customer support is in the mother language of the customer. Setting up the customer support is one of the main functions that will be handled by the national units (besides translation of manuals and instruction videos).

For 'tickets' (digital response) we use a CMS system that handles/monitors/manages the tickets. Operators will be able to handle any response in the quickest and shortest time possible.

For calls we will use VOIP to connected local service numbers to an Asterisk (VOIP switchboard environment) to service the calls without location demand but in the mother's language of the customer.

The availability of customer support (and attached warranty handling) is one of the facets (besides the digital engine for example) that will be used towards retail chains and other channels to negotiate the margin for them (as it's an easy product for them with no other demands than exposure and logistics, while logistics also can be handled for them too).

The kit development and the manuals and the instructions movies and the FAQ (Frequent Asked Questions) section on in the digital engine will be of that simplicity that there will not that much questions left. Preventing a question is the first and long term target, answering remaining questions is the second and short term target.



# **Warranty Handling**

The warranty period is 5 years. The warranty handling system is based on the ticket system of the CMS of Customer Care. For people without internet customer care could generate the warranty tickets.

We use the RMA (Return Merchandise Authorization) method, that gives both customers and us (and thereby also our sales channels) 100% security. This is needed as we are the 'outsourced' service partner of our sales/exposure channels.

The information flow will be handled by Customer Care. Warranty Handling takes care of the actual warranty product movements (in and out) and analysing of the tickets to improve the product quality based on real market response.





#### **Political Influences**

Political influences can be divided in mainly three fields: support, hindrance and risk. We need to have all those three clear in our analyses and we should anticipate on them.

The support from governments for the solar energy transition will be huge. Certainly for our model which is governmental budget neutral. In our business model governmental subsidies are obsolete and thereby absent. We make solar economic. We don't believe that all governmental clean energy subsidy arrangements will be paid out, as western governments have severe funding problems by relative overstretchness due the economic decline of the West. With our solar model governments and politicians can show something that don't cost them anything and still get the honour for it. They will use this to the max and we can profit big time of this. Another thing is VAT on solar. The one thing we really would like is a zero (0%) vat rate for solar. We will lobby to stimulate this. We know enough rational facets why this is a good idea for any economic area.

But governments also possible can hindrance the energy transition. As the profit huge of the oil/gas turnovers by taxes. Decentral energy will rob them for income. There's a possibility that they will go from a stimulating mode towards a hindering (aka taxation) mode (see for example: telegraaf.nl/buitenland/13046638/\_\_Belasting\_op\_zonnepanelen\_\_.html: an E 200 extra grid connection fee for decentral solar per household). But that's 180 degrees opposite to their former attitude, but it will happen: governments are drowning in debt and they will take any taxation possibility they see. Also this could be avoided too by emphasizing the economic benefits of solar energy for nations and economies. The grid will become decentral by this. Areas will make their own grid. Power will become a local issue.

Currency exchange risk. As the Euro and the Dollar tanks against the currencies of the emerging markets and have not that bright short and long term perspectives either, this is a real risk. It could be covered by Chinese governmental arrangements. A shipment flow arrangement could be organized (as that is in the Chinese interest to do so). A long period arrangement to deliver long term price stability will not be possible in our opinion. The upside is that solar still is declining gradually in price, which could cover aka counter balance the gradual decline of the Euro against the Renminbi. This counter effect could bring price stability even when the Euro further slides against the Renminbi or Dollar. Covering the currency exchange risk by western commercial companies is useless as recent financial history has proved that those companies think that insuring a risk is just about sending insurance invoices and delivering 'security' on paper and never have the reserves to cover the currency risks they said they should insure. The best aka safest solution is: pricing therefore should be 'live' aka no long term price commitments anywhere.

Import duty risk: An import duty risk or even import quota/restrictions risk on solar panels imported out of China could be installed. The EU and USA companies that weren't that good in crystallization physics and by that has lost their market share to Chinese competitors are lobbying to get their crystallization inefficiency and thereby excess pricing protected. China is not the innocent lamb it used to be any more. As soon this came into debate the immediately started counter measures like considering an import duty on EU wines etc. So China is no longer a nation that can be played around very easily by the powers of the old west. Also the environmental lobby is very strong against an increase import duty or even import quota/restrictions on Chinese PV. The best aka safest solution is: Pricing therefore should be 'live' aka no long term price commitments anywhere.

To cover both the currency exchange rate risk as the import duty risk we will encourage Chinese manufacturers to start production in Europe. The reason China is better in solar than Europe and the Us is not due cost structures, but just due better physics (solar = crystals = crystallization = physics). This is not something we say, this is what Steven Chu (Minister of Energy of the USA) has said (see for example this article: www.technologyreview.com/featured-story/426393/the-chinese-solar-machine). Times are changing: the East is better in physics than the West. Another Sputnik 1, 2 and 3 momentum. When Russia (with it giant math and physics potential) will enter the solar



game: they could become at rapid speed the winner. But unfortunately is Russia's economy today too much raw material orientated.

We're not that enthusiastic on the perspectives of both volume and freedom of global trade. We think the world has passed PeakWest and that the West is in structural decline. We think that also PeakRest aka PeakGlobalization is behind us and that the West will be hurt by it severely (due to PeakCredit: no further artificial credit driven economic 'growth' possible).

We think that PV will become an important facet of global trade and we think also that governments will grow protectionism around PV (as it delivers their economies more energy independence aka less foreign energy import dependence).

We see ACTA like legislation as a serious threat. The possibility of seizing container loads outside the realm of national legal systems is a serious threat to any global trade. It's unbelievable that the global trade organizations are cheerleading for such out of the normal legal system measures. It will destroy global trade to the max. This is why we will accumulate equity: you need a pocket full of money to fight the protectionists that will use fake IPR (Intellectual Property Rights) to hinder competitors that have developed better science and thereby better products. The last resort of the non-competitive is ACTA like trade agreements (as ACTA like legislation has stranded) that can be used to hinder competitors by seizing their containers till they get out that market.

In our perspective governments get serious windfall due to sustainable decentral energy solutions. We will lobby intensively that the will not subsidise it (not needed any more), but that they also not will hinder it. We will lobby intensively for a no-VAT regime on solar hardware. As in many nations that will reduce the earn back time with one solid year, which will make solar even more attractive.

In our perspectives energy policies need to be made locally. Energy strategies are also a municipal responsibility. This is obvious as power generation goes more and more decentral. We will support municipals by delivering them energy strategy templates.

But the biggest governmental influence ever on solar will be inflation. When that starts to roll all people (households, companies and municipals) will take their money out of the banks and put it on their roofs. Inflation will deliver the most powerful third party driven solar investment drive ever. Governments are drowning in debt. Governments will not be able to fix their fiscal problems and will chose all for inflation as why to get of out debt without having to change nothing. Inflation is the invisible tax on savings/pensions. Inflation is why money is just a medium of exchange and not a medium for wealth storage. The financial industry that is build on this wrong assumption will collapse. Governments will not change. Politicians are not well-known for their courage nor innovative views. The process of growing politicians is even contrary towards those two crucial facets. Politicians therefore will not be able to control the fiscal situations of their nations. Not by smart ways to cut spending (without cutting economies/societies), nor by smart ways to get their economies running. Inflation will hit everyone everywhere and solar energy will boom beyond expectation by it.



## **Model History**

In the early days where only macro projects and not micro focused. We designed large scale energy investments with a finance model model based on governmental guarantees. Designing projects like Desert Tech (a local produced aka silicon focused aka sand -concrete and glass- build version of Desertec) etc (but also tarsand to power, HVDC infrastructure, etc), was what we did. In 2007 we understood very well that that governmental guarantees became useless due the bank bailouts. Realizing that we refocused ourselves towards micro investments aka government free energy solutions.

In the more demand chain focused earlier version of Global PV Roll-Out model of 3 years ago (http://www.planck.org/downloads/Open-Finance-Platform-for-Energy-Investments.pdf) we too much counted on the organizational powers of media and banks regarding harvesting this new revenue stream. Open platforms is also something not everybody is interested in. These facets has proven to be misconceptions of us. Good models (aka models that delivers volume) don't require that much of middle parties, but facilitate them in a way that they can use the model instant without any difficult barrier that will stall their efforts.

In the more supply chain focused earlier version of Global PV Roll-Out model, like the one of 2 years ago (http://www.planck.org/downloads/Global-PV-Solar-Energy-Finance.pdf) we had an online supply market place in the ports of destination where manufacturers could compete with each towards demand in the area of price after the goods are landed. But the manufacturers didn't like that concept as they want to steer their production to the best price markets out of their own logistic system. So we dropped this online market place in the destination harbours, delivering the manufacturers the price they agree on at the moment of shipping and not at the moment of arrival. The online marketplace in ports of destination (which was based on shipments that weren't yet sold and against prices that weren't yet defined) was somewhat too much favouring the demand side of the solar chain, neglecting the needs/demands of the supply part of the solar chain (a fair/balanced price that delivers the manufacturer some margin that enables further innovation).

The business model you are reading right now corrects both these misconceptions. Learning is a process of continue improvement and adjustment based on feedback received. This model history is also included to proof that we're researching global solar roll-out models for quite some time: we're not just some new kids on the block in this.

Graafland has also written the Global Resource Analysis, the Global Future Analysis, made models for EnergyQE as QE3, wrote Energy Economics (a framework for both Energy Politics and Energy Finance) and many other publications and models on energy politics, energy securitization and energy finance. In the realm of central banks Graafland is somewhat known for his EnergyQE and Energy EBS models.

For more specific information on almost all facets on energy policies and possibilities of energy finance (financial and monetary) see the by Graafland written very comprehensive paper Energy Economics (http://www.planck.org/downloads/Energy-Economics.pdf). This paper delivers a total information framework for both energy politics and energy finance, with a lot of monetary engineering in it too. This paper is mostly known in the global monetary aka central banking realm.

There are more papers of Graafland out there. Most distributed are the Global Resources Analysis and the Global Future Analysis papers (both distributed 500,000 times and read/redistributed above 1,000,000 times). Further more several other papers on the relation between energy and finance and the monetary facets of those two. For example: the Obama Administration Energy Strategy. A paper written together with Hazel Henderson, a Club of Rome senior. For others: See some of them on www.planck.org.



# **Equity Finance**

The equity demand for a start method as described in the Start Plan (aka servicing the retail chains first with the use of a supply chain financier) is only E 500K, see the forecasts of the Current Account and the Capital Account in the attachments). But an equity supply of E 1 million would be deliver more equity and also more organizational space (for hiring more sales focused national specialists, for hiring more sales focused sector specialists and for finishing the virtual branded sales engine), but as said: E 500k could do the job too.

The equity financier will get a fixed ROI (Return on Investment) arrangement which will be negotiated based on mutual interest: A repayment of their investment plus a predefined ROI of certain % on their investment. This delivers the investors the payback and ROI they want, plus delivers the structure the dedication aka stability without any conflicting interest.

The equity financier could be a) a party that are just commercial recognizing the market perspectives therefore ROI focused, b) a party that could benefit in turnover out of the model and c) a party with a mix of commercial and ideological motivations out of the realm of environment, energy and prosperity security, anti energy-wars, anti big-oil, etc, which are aiming for both a ROI and seeing their capital at work in changing the world in a way they want it to change.

As by the in the Starting Plan described start method (servicing national markets by retail chains first) there's not that much need for initiating national units (something we had in the earlier versions of this global solar roll-out model).

As we want to build high equity levels within the company (as all profits will stay in the company due to the no-shareholders legal design): For this equity growth reason we prefer instead of the above mentioned dutch structure the E-Zone option. As than there's no 20% of profits equity leak towards the dutch tax authorities, but only an 2% profit tax. This demands only an E-Zone NV, as the foundation still can be a dutch one. Even better is getting a ruling based on this E-zone intention from the dutch tax authorities that delivers the same 2% tax regime also to the 100% dutch structure. That would be the most beautiful solution of course. We would like the opinion of the supply chain financier in this. It would build more equity, equity that will be collateral to the supply chain financier too.

**Legal Entities** 

The legal entity that will be used is Energy Indus Corporation CV as corporation (a dutch commercial legal entity that can be registered by a notary in one day). Energy Indus Corporation CV will be hold by Energy Indus Foundation (the dutch non-commercial entity named 'stichting' that must be created a notary office). The contracts therefore should be made on Energy Indus Foundation (with covering it's subsidiary Energy Indus Corporation and all may be needed national import entities)?

So there will be no external stockholders, nor private owners. The organization is dedicated to her objectives, not to creating external share holder values (which waters down the equity level each year). Making solar energy everywhere available for everyone is the one and only goal.

See the Equity Finance page (one page back) for the remarks on the combination of a dutch Foundation and an E-Zone NV (with only 2% tax regime till 1 January 2026) and the possibilities of making a ruling with the dutch tax authorities. This will only be done in mutual consultation with the supply chain financier. Also a similar ruling with the dutch tax authorities could be possible, the more as the situation in Curação is not that stable right now.

The cooperation legal entity could also be considered later on: running a company purely in the interest of it stakeholders (aka: in the interest of customers, the distributors towards this customers and the financiers of the customers and distributors).



## **Management Team**

The management is divided in an executive board (the management of the corporation) and a non-executive board (the management of the foundation). As the ownership of the corporation is with the foundation, the foundation is the highest power level. The foundation operates the corporation for it's objectives 'making solar energy available for everyone everywhere'. We like the legacy of F.W. Raiffeisen very much and see his legacy as a valid example for modern days.

Board of both the corporation and the foundation will be made up by Gijs Graafland at the core/start, with the goal to get the organization up and running as fast as possible. If the executive board is running and doing well than install a good non-executive board. Graafland has sold in 2007 all he had and start working on developing global energy transition models. The work of Graafland (including testimonials) can be found Planck Foundation's website at www.planck.org. He has build some name in the monetary world due to his Energy QE model and his EBS (Energy Backed Security) model. Due to the exposure both the Global Resources Analysis and the Global Future Analysis got in the corporate world (and also due to his earlier development work in the internet/telecom sector: he understood packet switching and its implication for communication and information already in in the seventies as a teenager), he also has contact with and advises several CEOs of large global corporations regarding both sustainability (economic and ecological) and technology (digital infrastructures, digital services and digital revenues). Graafland is good at kickstarting organizations in no-time. He did that a lot and can reach much traction in very short time.

We're talking with several other people to get involved, former members of parliament, former Ministers, former bankers, former CEOs are considering a position, but we don't publish their names before they say yes to the function. For the non-executive board we are talking with some CEOs of multinationals (people we advised in the past or still advising). We aim for an executive board and a non-executive board that consist of people of all continents and covers all business facets. We could finish this talks first and than send this model, but that would be a waste of time: we like parallel actions in a realization: serial actions in realisation waste too much precious time.



# **Organization Structure**

The organization structure is concentrated in functional groups: general (management and finance), marketing (offline marketing templates and online virtual branded web environment), product (technology, purchase, logistics), sector units (customizing the approach aka marketing towards an economic sector) and national units (rolling out the products towards sectors in a nation).

The management will control the direction, the speed, create intensive auditing and provide functional support towards the sector units and the nation units. She will not be involved in micro management (as that would be malfunctioning).

The sector units and the national units will operate very much as independent cells, the even can be on unique locations (like for national units: in that nation). They are tight controlled on sales and costs (they must report those two each week, these figures will be audited on very regular base aka in a high frequency), but as central management we give them a lot of freedom. Otherwise the organization will be over-managed (which will lead to less growth). No management team ever can have oversight on all sectors and all nations.

The management archives an organism structure: we install intensive control mechanisms but as head/brains we don't control the organs, we control the direction and audit the progress very intensively. We correct directly when something goes wrong is sales or costs. The units are not allowed to spend any money or making deals without permission from above. So a combination of wide freedom with tight financial control.



**Start Actions** 

We want to start. We need a supply chain financier who understand the market potential of our product model and market approach. We are willing to give this supply chain financier any cession needed to ensure their position: everything is open for collateral.

And yes: we need start equity, at least E 500k, but better E 1 mio. We prefer to get this from the supply chain financier. Out of some special project budget. We will deliver the supply chain financier turnover, foreign market positions and all benefits of being involved in economic and energy transition too.

The investment committee of the supply chain financier could chose a) to reject the opportunity, b) to become the supply chain financier of this global solar roll-out model or c) to become the supply chain financier of this global solar roll-out model and deposit the needed startup equity too (in exchange of a collateral of both the shares of the company and the digital sales engine for example).

The supply chain financier also can demand some control over management position appointments if they like, so that's there another guarantee that the solar organization will be build according to Raiffeisen's legacy. We're also willing to locate the office of the organization anywhere in the realm of the supply chain financier, if they like that.

We like to start in October 2012, so the first orders will be in for the end of the year. The legal identities will be made according the wish of the supply chain financier in just one day, as the notary office is willing to create both the foundation and the CV on request in this time frame.

Sounds the model not all that easy for you? Just divide it in upstream (supply) handling and downstream (demand) handling. For a financial specialist the finance facets will not sound that difficult to understand. For a marketing specialist the sales facets will not sound that difficult to understand.

The core of the model is securing supply (as described) and securing demand (as described). Voluminous exposure is what drives the model. The exposure technology aka order technology sounds complicated too, but we know what we're talking about, it's just digital templates for online/offline advertising communicating with a virtual branded sales engine. No rocket science for who understands these technologies (as we do).



## **Future Perspectives**

While we roll-out solar in all nations, we build a financial/marketing/sales/logistics organization capable to do more. We will use this capabilities for other decentral energy product groups than solar.

For example getting wind energy cheaper than grid power has our attention too. Not macro wind, but decentral micro wind. There a lot to win in that area too, by redesigning the current default configurations. We're currently developing together with a Chinese manufacturer an E 1000 enduser priced windmill for domestic use that will produce an average of 1000 kWh per year. Similar to our solar kit design, we strip any thing that's not needed and add anything that needed. Reducing sound and resonance are the main objectives we work on right now.

Also power storage has our interest. That will become a huge global market of domestic/micro appliances too. People will want to store their power production in their company/household. Areas will want to store their energy production in excess hours for their energy deficit hours. This will 'fly' very fast in nations with a bad power infra (like South Africa).

Electric Mobility (bikes and cars) has our interest too. Even more as the batteries in these vehicles can be charged with excess solar/wind power. EV will rule the short distance mobility market, but will never conquer the long distance mobility market.

Buying solar patents and making them available for all manufacturers could also be a way to speed up the global solar roll-out (aka: protect the global solar roll-out from hawks that want to parasite the solar market.

Micro (household), mesa (company/area) and macro (municipal) gas2power plants have also our interest: they will become a huge market as soon as power prices will go 'live' (aka get flexible based on supply/demand: which will happen sooner or later: local energy price xml feeds will be the future way of defining the local price of electricity). As they can produce in solar/wind poor times the base load very easy (as they can be started full automatically in just some minutes).

We build a distribution organization with the solar product and later on other decentral energy products like wind, gas2power, hydrogen, and mobility will become a part of it too.

Geothermal and deserttech is something we're also very interested in. As that are not micro nor mesa investments but macro (central) investments in production facilities and distribution networks, we think we should do that not in the same organization (as the whole concept of some massive concentrated macro is 180 degrees different of massive in volume decentral micro/mesa). But we sure want to do central energy technology in the future, but the first 5 years we will concentrate ourselves fully on decentral energy solutions, as that will be the direction the energy market will go.

In our perspective geothermal will emerge as the future central energy source (delivering 7/24 base loads on the power grid for industry and transport/mobility), just because it's fuelless, endless, limitless. The low potential waste energy could be recycled with some gas feed or be used in greenhouse based agriculture around this plants.

Deserttech (not Desertec build in the West, but Deserttech build in the desert out of the sand of the desert -concrete and glass- will be the power source of tropical areas with some desert areas in the neighbourhood. The cost of Deserttech is half that of Desertec and stimulates the economies of the regions/nations where it's both build and used significant.

Power will become mainly a local issue. This will deliver completely different from status qua grid architecture. There will be a demand for new type of local grid equipment, with variable power prices during the day. Power consumption will move from the current on demand model towards a more on supply model.



**Epilogue** 

Now solar energy technology has become economic attractive (and in our design even cheaper than grid power) for households and small to medium sized businesses, it will go mainstream aka will become huge in a very short time. Earn back times are reduced to only 4, 5 or 6 years (depending on the marketing channel) and after that 2 decades of free energy delivers an economic attractive setting for a solar boom.

For large businesses the calculation is yet different: as they pay less energy transport tax than households and small en medium businesses and therefore they pay less per kWh. So they have an 2 year longer earn back time. Large businesses therefore chose for solar for power redundancy/security or green washing effects of the combination of both.

Economic attractive solar energy is not our UPS: it's just a result of technological progress: reducing the price of solar panels with a factor of 200 since it's commercial introduction in seventies mainly due to better crystallization processes within factories in China. The rest of the world has lost the solar battle of China not for reason of low wages, but primarily due the more superior crystallization physics and by that crystallization technology of China. Times are changing, not only in energy but also in the decline of western superiority in physics and technology.

Another effect of this by superior physics caused structural price fall is the fact that solar panels are no longer transported by air but (as the price is stabilizing aka fall in a much slower rate) now mainly are shipped by sea. This has lowered the logistic costs of solar energy and reduced the price of solar panels instant somewhere between E 50 and E 75 per piece. The rise of sea shipping of solar is also a proof that the price of solar is more stabilizing than falling (although we expect it will decline at least another 33% in the next 5 years, but that price fall will be erased by the value decline of the euro and the dollar in global trade).

As solar energy is getting commercial attractive (aka has become cheaper than power grid prices) we developed a technological/export/import/marketing/distribution/installation model which reduced the earn back times with one or two years compared to all present market competitors. When solar is made easy and there are instruction videos on YouTube everybody can install their own solar panels very easily. This easy do-it-yourself model completely turns upside-down the solar market where installation is a huge part of the cost price right now. In our solar model the earn back time is even as short as 6, 5 or even 4 years (the number of years is depending on the sales channel the product is going to the market), with possible extra 20 years of free energy as bonus. With this short earn back time and the following two decades of free energy solar has become attractive for each household, each company and each government.

The design of the supply chain is very important for making solar available for everyone everywhere. As China has won the global solar technology for now, solar modules and solar inverters are produced in China. This implies a very long logistic supply line. This also implies quite a culture difference between the supply and demand part of this market. To make things even more complicated: solar is a new economic sector, so there are not that much long/stable years long in operation relations within the solar sector. Turning solar supply/demand into a well functioning voluminous engine is very important for delivering solar huge volume. Making/operating a well functioning supply chain of solar into western markets will deliver solar it's volume. Export finance/guarantees towards solar exports of the Chinese Government is a crucial part for making such a voluminous supply line. As it will deliver the manufacturers payment the payment security they need. A western supply chain financier should perform on the other side of the supply chain. Than volumes can be realized as the capital part of the supply line is covered. Both the Chinese governmental export financier/guarantor as the western supply chain financier should take the exposure guarantee (described in this paper) as foundation for their part of the chain. Otherwise the supply/demand chain will never get voluminous, aka voluminous exposure will result in 2 months of delivering time between orders and deliveries.

The design of the demand chain is very important for making solar available for everyone everywhere. Making solar easy accessible for everyone everywhere is our goal. This is not only be



done by making it available everywhere against attractive prices (due to a right product configuration supplied by a good performing supply chain), but also in a marketing model with not one complex choice (as nobody of the target group knows anything of solar). The main product offered to all this channels is an easy-to-install all-in-one solar kit of 1000 PeakWatt of 4 solar panels of 250 PeakWatt, an adequate micro DC/AC inverter for those 4 panels, a complete mounting kit for those 4 panels and a manual that has everything needed within it. These 1000 PeakWatt solar kits delivering 900 till 1100 kWh a year, depending on the geographical location and mounting location. With this standard solar kit, people, businesses and governments that wants solar, now only has to chose how much kits they want and if they want the flat roof or the tile roof version. Making a chose for solar even more easy is just not possible. Those two easy choices makes the product also intellectual accessible for everyone. Knowledge of solar energy is no longer required, it's has been broken down to just a matter of measuring the size of their own roof. So simple is our solar model for the user.

The marketing technological/material delivers virtual branding to the core of all the channels in the whole distribution model. Branding is just a variable that can be filled in very easily due to marketing technology and manual production. Any third party retail or other brand can be used instantly. Besides that there are several ready to use own brands (Energy Indus, Bye Oil - Hello Sun, Oil Wars Solar Energy, and Make A Change Now) available too. These three can cover the whole market aka communication volume spectrum (commercial, semi ideological and full ideological). Of course the separate products (like only panels, only inverters and only mounting kits) are also available for some specific channels if they want that. The sales channels explored in each nation are listed below.

The design of whole roll-out model aka the combination of the standard solar kit, the import/distribution model, the multichannel marketing volume all together has just one goal: taking the energy market in just a few years. In plain English: solar on each roof within a few years in each nation we will start this model. Delivering a complete other energy situation aka facilitating a paradigmatic energy change for those nations. The primary market focus is Europe for the moment, but this will be extended as soon as possible as Europe is very unstable right now.

In a stable euro value scenario the price of the solar would decline gradually further (aka the price per kit could be the same but the PeakWatt value would rise by maintaining the same kit price level). Unfortunately the value of the euro is not stable. Nobody knows what the future brings, but it will be a high inflation within the euro-zone or the euro will (complete or partial) collapse. For now we think a split of the euro-zone in a northern region and southern region is the most likely scenario. The nations in the northern zone will no longer be RAW (ready, willing and able) to subsidize the southern region.

The standard solar kit will be assembled purely based on specifications (so totally brand/supplier independent) and can be feed therefore with products of many manufacturers. This prevents build-in bottlenecks in both supply/continuity and price/comparativeness.

What will be the size of the solar market? Probably half the size of the current grid power market. Maybe more as solar will power some EV too and it thereby also will consume some of the vehicle fuel market too. Maybe some more as it will consume some of the mainly natural gas driven house/water warming market too.

**Attachments** 

Solar Model Forecasts www.energyindus.com/Energy-Indus-Solar-Model-Forecasts.pdf

Solar One Kit Calculation www.energyindus.com/Energy-Indus-Solar-One-Kit-Calculation.pdf

Global Solar Rollout Diagram www.energyindus.com/Energy-Indus-Solar-Global-Rollout-Diagram.pdf

Capital to Energy Model (Energy QE and Energy Backed Securities) www.energyindus.com/Energy-Indus-Solar-Capital-to-Energy-Model.pdf

The latest version of this Energy Indus Solar Global Rollout Model can be found online at: www.energyindus.com/Energy-Indus-Solar-Global-Rollout-Model.pdf

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