

HZ20222049

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## CleanTech 2022 Budget Meeting



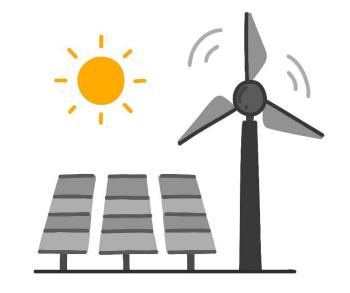
**Overview** 



Issue 1 Annual Budget Executive Plan

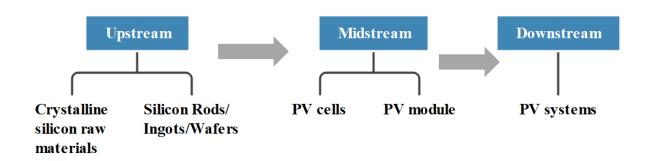


**Issue 2 R&D Budget Proposal** 



#### **Overview**

#### **Industry Analysis**



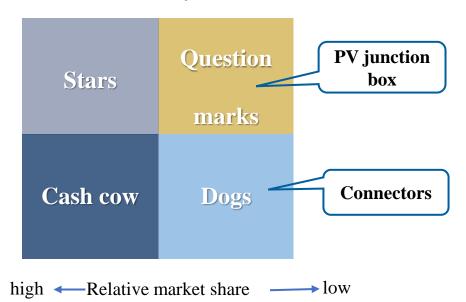
**Weak Bargaining Power & Serious Competition** 

#### **Product Analysis —BCG matrix**

high

Sales growth rate

low



**Low Market Share** 

## **Problems**Material Cost Increase

Serious Competition
Low Market Share

#### **Proposals**

Annual Budget Executive Plan R&D Budget Proposal

The Road to Success for CleanTech

# Issue 1 Annual Budget Executive Plan

Achieve CleanTech's Annual Budget--Set KPI for Departments

## **Suggestions:**

- 1. Sales Volume Increase 25%;
- 2. Operating Fixed Cost Decrease 10%;
- 3. Financial Expense & Administrative Expense Decrease 30%

## **Applicable KPI**

Income	2021 Beginning Balance ((10 thousand yuan)	Applicable Budget (10 thousand yuan)	Change
Operating Revenue	58,159	74,152.73	Sales Volume increases 25%
Operating Cost	46,584	59,219.91	Operating variable cost increases 5%; Operating fixed cost decreases 10%
<b>Gross Profit</b>	11,575	14,932.82	
Taxes and Surcharges	159	200.21	
Operating Expense	1,007	1,282.84	
Administrative Expense	1,367	956.90	Administrative Expense decreases 30%
R&D Expense	2,910	3,707.64	
Financial Expense	168	117.60	Financial Expense decreases 30%
Operating Profit	5,964	8,167.62	
Non-Business Expenditure	20	20.00	
<b>Total Profit</b>	5,944	8,147.62	
Income Tax	817	1,140.67	
<b>Net Profit</b>	5,127	7,350.49	

Asset	Amount (10 thousand yuan)
2021 Ending Balance(E)	60,890.00
2022 Budget Basis	67,740.00

Asset Turnover Rate = 
$$\frac{\text{Operating Revenue}}{\text{Average Asset}} = 1.153$$

**Target 1 : Operating Revenue > 73,000** 

✓ Operating Revenue = 74,152.73

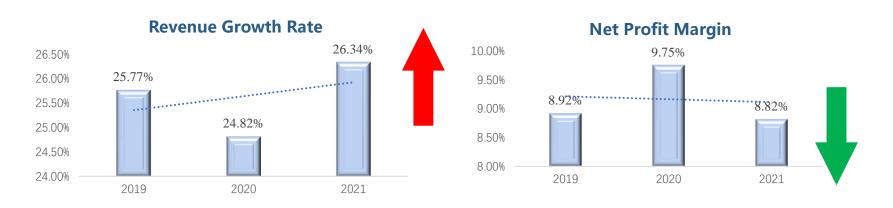
Target 2 : Net Profit > 7000

✓ Net Profit =7,350.49

**Target 3 : Asset Turnover Rate > 1.15** 

✓ Asset Turnover Rate = 1.153

#### **Vertical Comparison to Identify Problems**



Problem Recognition:
Net Profit not in Sync with
Revenue Growth

Indicators	2019	2020	2021
Operating Cost Rate	75.70%	77.90%	80.10%
ministrative Expense Rate	-	2.69%	2.35%
Net Profit Growth Rate	12.20%	36.46%	14.21%

Indicators	2019	2020	2021
Percentage of Accounts Receivable	43.48%	42.92%	56.93%
Receivables Turnover	2.30	2.33	1.94
Inventory Turnover	5.40	5.68	5.30

#### **Reasons:**

- 1. Significant increase in operating costs
- 2. The percentage of **administrative expenses** remains high
- 3. **Net profit growth** slowing Original industry has bottlenecks, need to upgrade track
- 4. Over-representation of **receivables** and the **turnover ratio** is decreasing
- 5. Low **inventory turnover**, backlog will increase storage costs

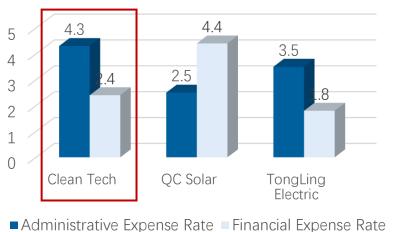
## **Horizontal Comparison to Identify Problems**

Indicators	Clean Tech	LingXian PV	MingXi PV	QC Solar	TongLing Electric
Revenue Growth Rate	26.34%	38.02%	48.11%	46.20%	35.42%
Net Profit Growth Rate	14.21%	16.33%	20.16%	1.76%	39.91
Gross Profit Margin	19.90%	18.70%	23.00%	18.36%	14.26%
Net Profit Margin	8.82%	7.90%	10.90%	8.81%	5.98%

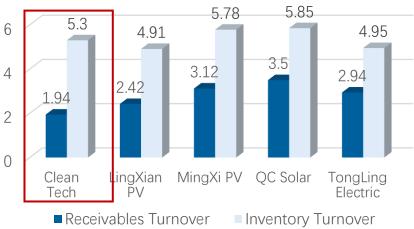
#### **Problem Recognition:**

- 1. Slow revenue growth and profit growth rate.
- 2. Low gross margin and net profit margin.

#### **Analysis of Costs**



#### **Analysis of Asset Structure**

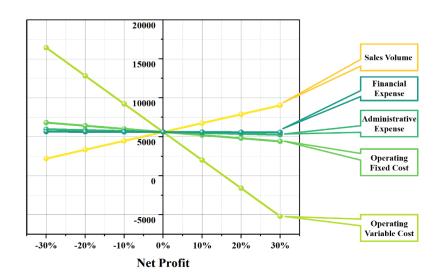


#### Reasons:

- 1. High administrative expense rate
- 2. Room to reduce the financial expense
- 3. **Receivable turnover** rate is too low compared to the industry
- 4. **Inventory turnover** is relatively low

## **Sensitive Analysis**

Net profit(amount)  Percentage change  Item	ge -30%	-20%	-10%	0	10%	20%	30%
sales volume	2199.38	3338.37	4477.35	5616.34	6755.33	7894.31	9033.30
operating variable cost	16433.14	12827.54	9221.94	5616.34	2010.74	-1594.86	-5200.47
operating fixed cost	6818.21	6417.58	6016.96	5616.34	5215.72	4815.09	4414.47
Administrative Expense	5969.03	5851.46	5733.90	5616.34	5498.78	5381.22	5263.65
Financial Expense	5659.68	5645.24	5630.79	5616.34	5601.89	5587.44	5573.00



•	200% -	
	150% -	Sales Volume
	100% -	Financial
	50%	Expense
		Administrative Expense
	-50%	Operating
	-100% -	Fixed Cost
	-150% -	
	-200% -	Operating Variable Cost
-30% -20%	Net Profit Percentage Change	

Net profit Percentage (Percentage Change) change Item	ge-30%	-20%	-10%	0	10%	20%	30%
sales volume	-60.84%	-40.56%	-20.28%	0.00%	20.28%	40.56%	60.84%
operating variable cost	192.60%	128.40%	64.20%	0.00%	-64.20%	-128.40%	-192.60%
operating fixed cost	21.40%	14.27%	7.13%	0.00%	-7.13%	-14.27%	-21.40%
<b>Administrative Expense</b>	6.28%	4.19%	2.09%	0.00%	-2.09%	-4.19%	-6.28%
Financial Expense	0.77%	0.51%	0.26%	0.00%	-0.26%	-0.51%	-0.77%

**Sensitivity**: Operating Variable Cost > Sales Volume > Operating Fixed Cost > Administrative Expense > Financial Expense

## **KPI** for Each Department

Income	2021 Beginning Balance (10 thousand yuan)	Applicable Budget (10 thousand yuan)	Change	Responsible Department
Operating Revenue	58,159	74,152.73	Sales Volume increases 25%	Sales Department
Operating Cost	46,584	59,219.91	Operating variable cost increases 5% Operating fixed cost decreases 10%	Purchasing Department Production Center Warehousing Department
Administrative Expense	1,367	956.90	Administrative Expense decreases 30%	No specific Department, an overall cost control plan
Financial Expense	168	117.60	Financial Expense decreases 30%	Financial Department

Direct material takes up 80% operating cost, constitutes of:

- ➤ Purchase Price controlled by long-order agreement
- ➤ Transportation fee, insurance & loading fee controlled by Activity Based Classification

#### **Action Plan in Value Chain**

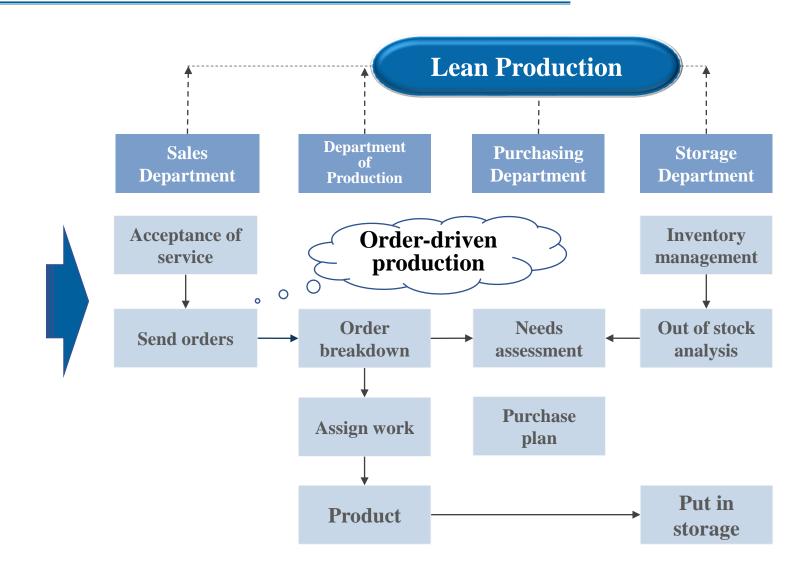
Finance		Hedging		Receivable	SIII
Human Resources				I I	Supportive
Research & Development					Retwittes
Purchasing	Activity Based Classification	Long-order Agreement			
	Lean Production	Customized Product		Integration Scheme	Primary A
	Warehousing	Production	Outbound Logistics	Sales	Customer Services

Cost Control in Value Chain



## Warehousing Department - Lean production

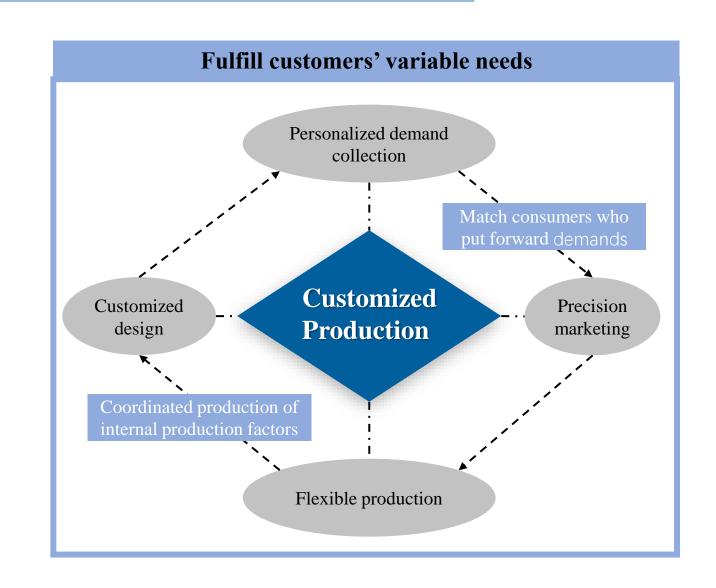






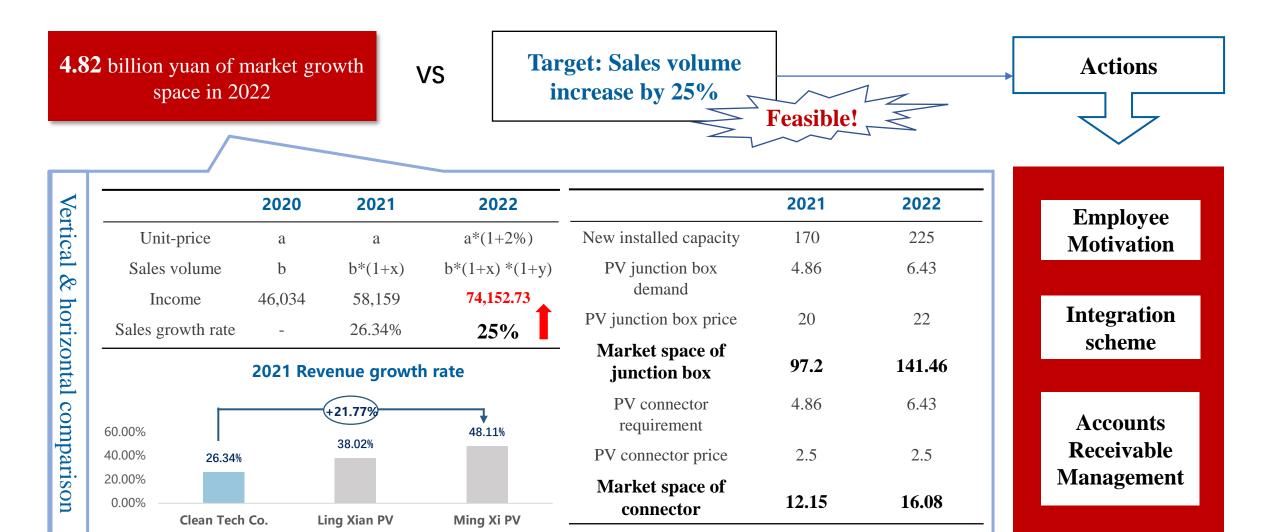
#### **Production Center - Customized Product**







#### **Sales Department**



**Cost Control** in Value Chain

Cost Control in Value Chain

**Primary Activities** 



## Sales Department - Employee Motivation

Goals and results



Expand sales volume and improve cash collection

Key Performance Indicators	Assessment items	Assessment criteria	Proportion
	Performance tasks	Performance up to standard	10%
Performance indicators (50%)	Cash collection rate	Proportion of cash receipts in sales	30%
	Sales expense ratio	Amount reimbursed due to sales	10%
		Confirm signing	
		The customer has requirements and has contacted the person in charge	
Sales capacity	Customer development and	Old customers follow up or develop new customers with budget	45%
(50%)	maintenance	Interested in the product but no need for it and leave contact information	
		Invalid customer	
	Sales growth rate	Sales increment compared with last month	5%
Total points			

**Cost Control** in Value Chain

**Primary Activities** 

**Supportive Activities** 



## Sales Department - Integration scheme

Goals and results



Improve customer satisfaction and expand sales



#### **Product Integration**

Strategic cooperation with other component suppliers



**Combined sales provide convenience for customers** 

**Service Integration** 

"Sales + Installation + After-sales Service"



**Improve customer satisfaction** 

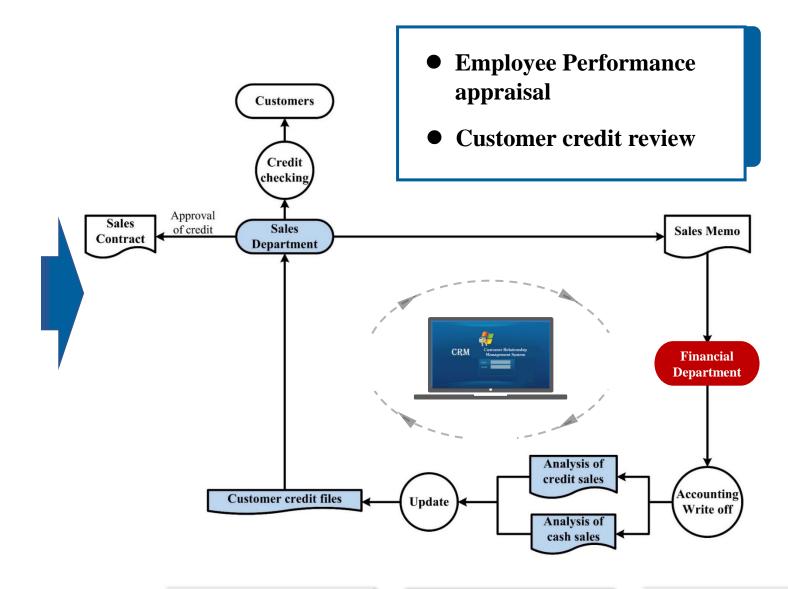


## Sales Department - Accounts Receivable Management

Goals and results

25%
Sales Volume

Department collaboration to improve cash collection!

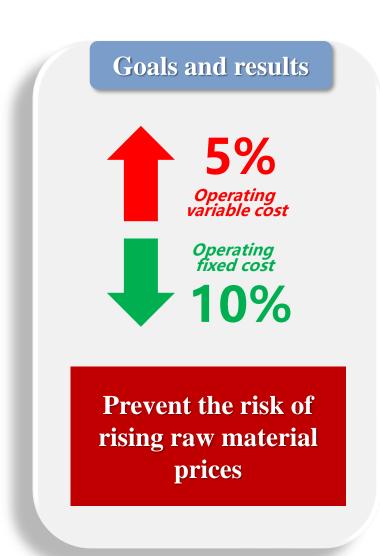


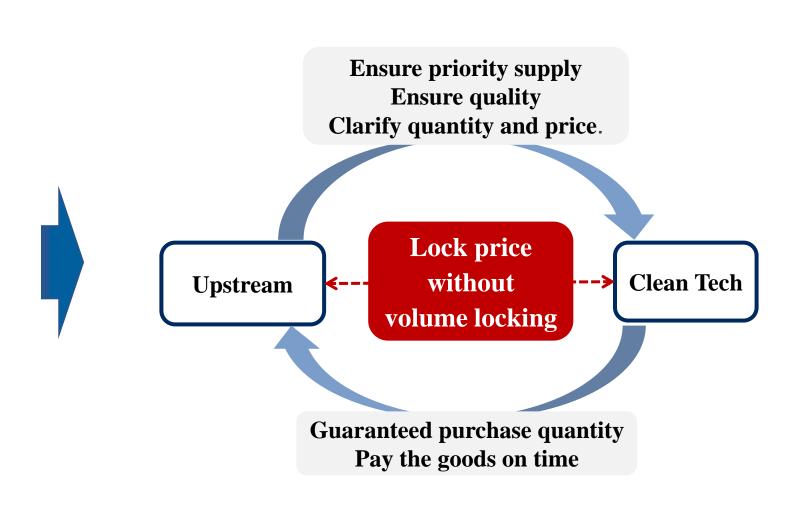
Cost Control in Value Chain

**Primary Activities** 



## Purchasing Department - Long-order Agreement







## **Purchasing Department** - Activity Based Classification

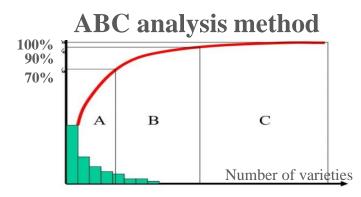
Goals and results

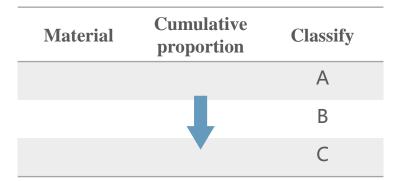


Planned and focused procurement to reduce resource waste and material cost

Inventory type	Characteristic	Management	procurement method
A	The number of varieties is small, but the most funds are occupied	<b>Key Management</b> . Small batch and multi-batch purchase	Bidding procurement
В	The number of varieties and the amount of funds are in the middle	Secondary key Management.	Competitive procurement
C	The number of varieties is large, but the funds occupation is small	General Management.	Quantitative procurement

Amount of Money





Cost Control in Value Chain

**Primary Activities** 

**Supportive Activities** 

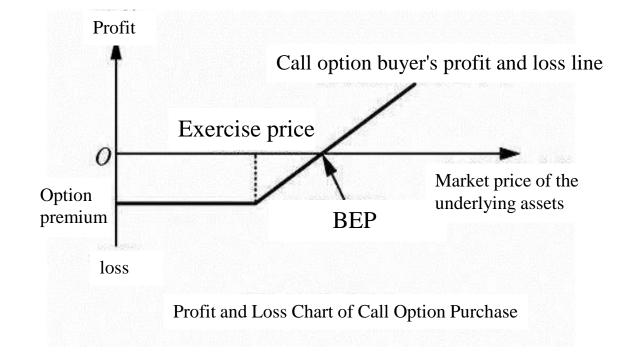


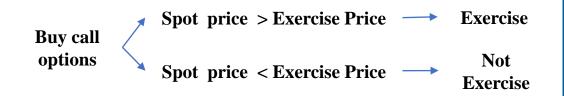
## Financial Department - Hedging

Goals and results



Buy copper options to prevent the risk of copper price rising



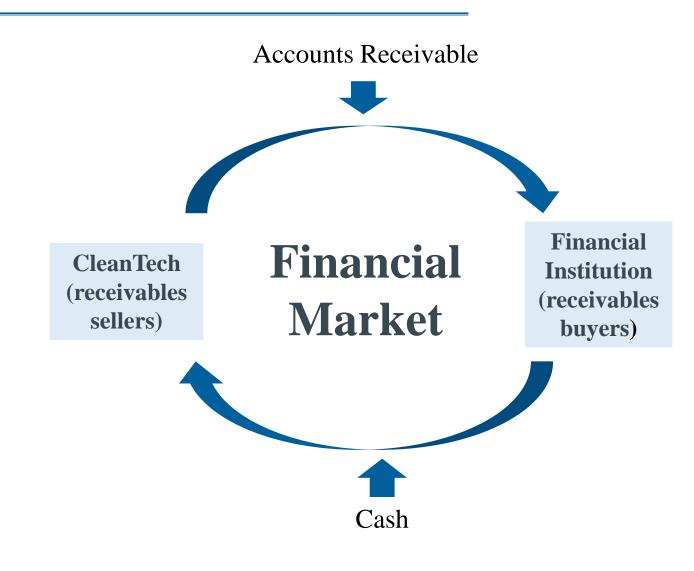


Lock in maximum cost & stabilize material price



#### Financial Department - Accounts Receivable Securitization





# Issue 2 R&D Budget Proposal

#### Short-term applicable cost control work plan:

- 1. Heavily rely on 25% sales volume increase
- 2.Inevitable material cost increase

## **Proposal:**

- 1. Invest 50 million in R&D is Feasible
- 2. 70% Invest in Technology Development and 30% in Product Development

## **Analysis of Feasibility and Necessity**

## **Necessity**



The intelligent level of photovoltaic industry **be significantly improved** by 2025

Downstream **technical innovation requires** synchronous innovation of junction box



Intelligent junction box has **good performance** and **high gross profit**, so it must seize the track

## **Feasibility**

Technically and financially feasible





Market feasible: gross profit is high, which can make a lot of profits in a short time

**Channel feasible**: have existing customer resources and sales channels



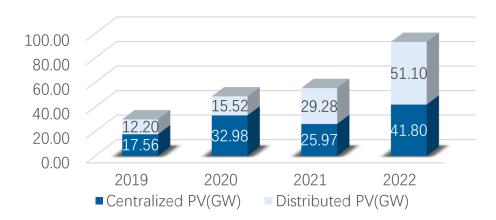
**Upgrade** the track to the intelligent junction box!

#### **NPV & Payback Period**

## Is it profitable?



#### **Percentage of New PV Installations in China**

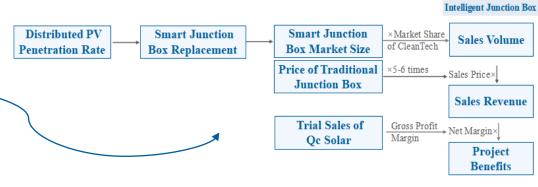


#### **Key Assumptions**

- 1. Intelligent junction box replacement ratio is around 17.35%.
- 2. The gross profit margin of Intelligent junction box is around 50%.

#### **Gross Profit Margin of Qc Sola Intelligent Junction Box**





## **NPV & Payback Period**

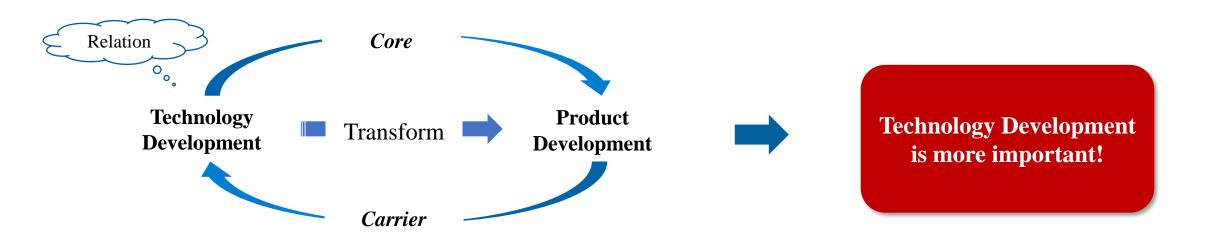
2021	2022E	2023E	2024E	2025E
13.78				
68.90				
50%				
103.35	103.35	103.35	103.35	103.35
13315.50	18679.25	19090.91	19473.68	20338.98
53.40%	58.37%	58.37%	58.37%	58.37%
13.35%	14.59%	14.59%	14.59%	14.59%
183716.95	281724.28	287933.02	293706.04	306756.67
-	-	-	1%	3%
-	-	-	25%	25%
-	-500	-500	-	-
-	-		734.27	2300.68
-		102	1028.36	
		1.27	1.27 years	
	13.78 68.90 50% 103.35 13315.50 53.40% 13.35%	13.78 68.90 50% 103.35 13315.50 18679.25 53.40% 58.37% 13.35% 14.59% 183716.95 281724.28	13.78         68.90         50%         103.35       103.35         13315.50       18679.25       19090.91         53.40%       58.37%       58.37%         13.35%       14.59%       14.59%         183716.95       281724.28       287933.02         -       -       -         -	13.78         68.90         50%         103.35       103.35       103.35       103.35         13315.50       18679.25       19090.91       19473.68         53.40%       58.37%       58.37%       58.37%         13.35%       14.59%       14.59%       14.59%         183716.95       281724.28       287933.02       293706.04         -       -       -       25%         -       -       500       -         -       -       734.27         -       1028.36

Invest!

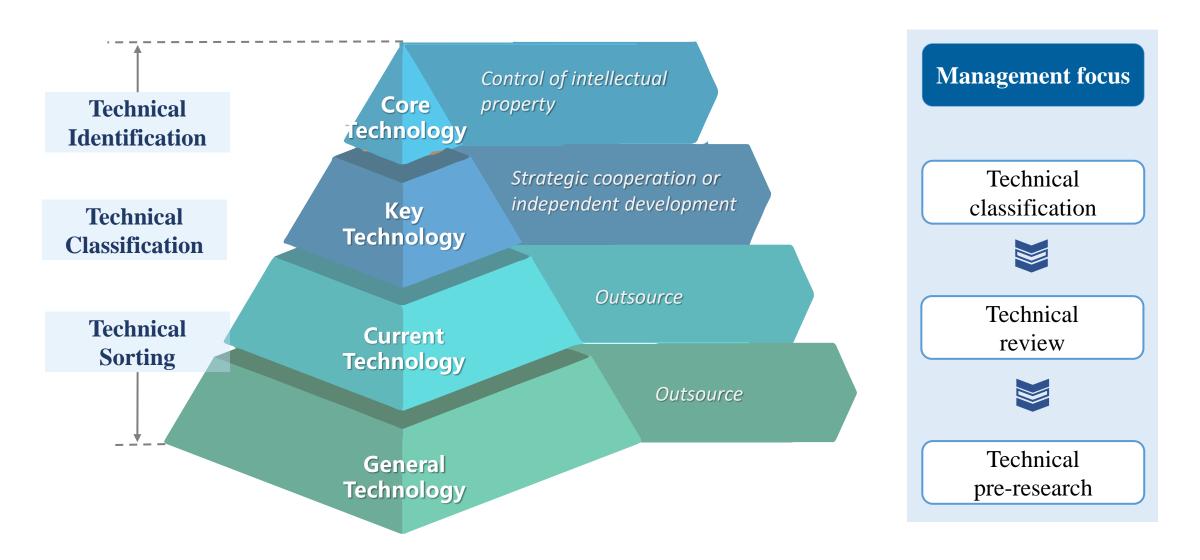
NPV>0
Payback Period in
line with expectations

## "Technology Development" VS "Product Development"

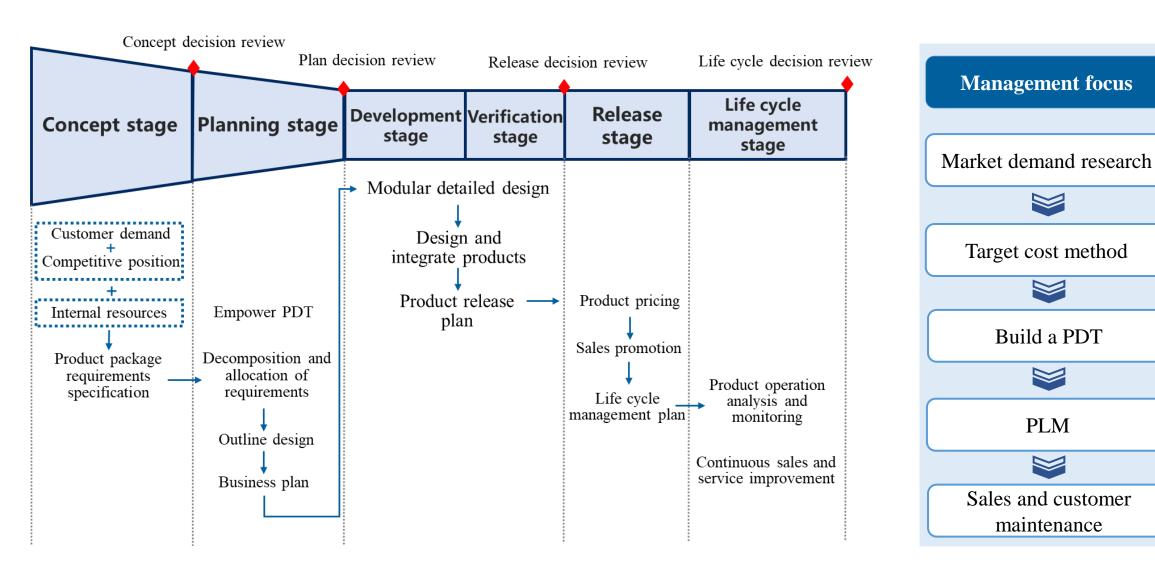
	Technology Development	Product Development	
Focus	Focus on principle research and technical achievements, to support product development.	Directly facing customers and markets, to generate sales income.	
Characteristic	Longer cycle and more difficult, but can gain a favorable competitive position.	Less difficult but more replaceable.	
<b>Accounting Treatment</b>	Totally expensed	Expensed or Capitalized	
Impact on Income Tax	Gain immediate 75% tax-deduction	For expensed cost, gain 75% deduction; for capitalized cost gain 175% tax-offset effect during asset amortization	



## **Management Focus of Technology Development**



## **Management Focus of Product Development**



#### **Budget Allocation**

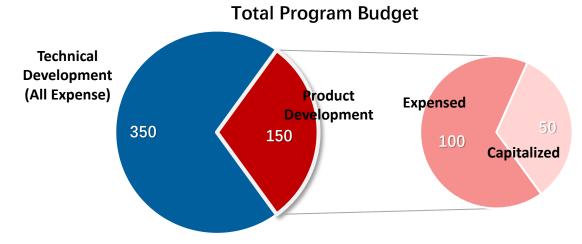
Income	100% Expensed	90% Expensed, 10% Capitalized	80% Expensed, 20% Capitalized
Operating Revenue	74152.73	74152.73	74152.73
R&D Expense	4207.64	4157.64	4107.64
Income Tax	1165.89	1179.02	1192.14
Net Profit	6981.74	7018.61	7055.49
<b>Total Assets Turnover</b>	1.16	1.16	1.15

#### **Accounting Treatment:**

- ☐ Only 90% expensed 10 capitalized Achievement of budget targets.
- □ 90% expensed and 10% capitalized of ¥5 million of R&D investment.

#### **Breakdown of Budget:**

- Refer to Huawei IPD using the "7-2-1" principle for resource allocation.
- □ 70% is for technical development and 30% is for product development.



Technical Development

Product Development Product Development-Expense

Product Developmen Product Development-Capitalized

#### **Brief Summary**

#### **Investment Decision:**

Intelligent junction box project is rewarding and feasible.



#### **Investment Focus:**

Technology development is more important



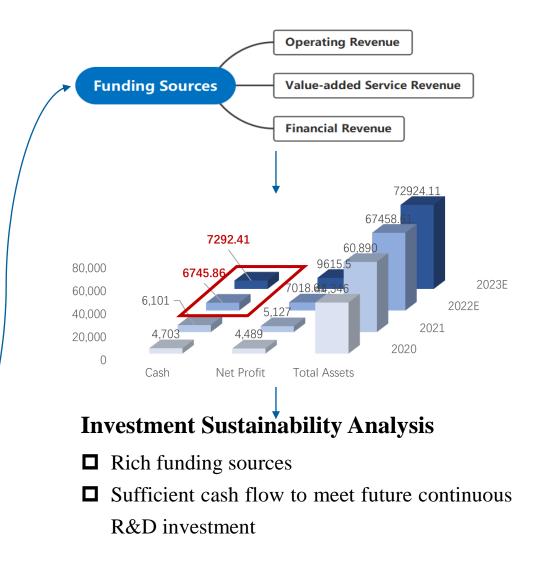
#### **Investment Budget:**

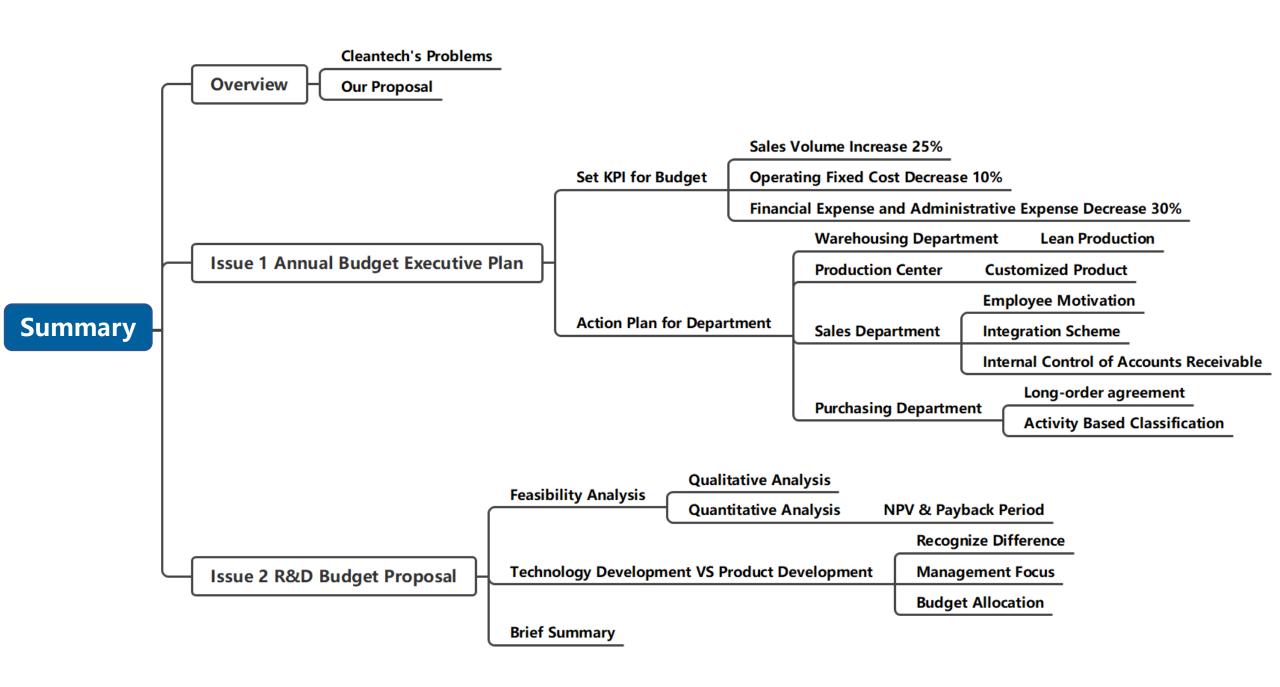
70% for technical development (fully expensed)
30% for product development
(20% expensed+10% capitalized)



#### **Follow-on Investment Support:**

Adequate future revenue and capital flow.







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