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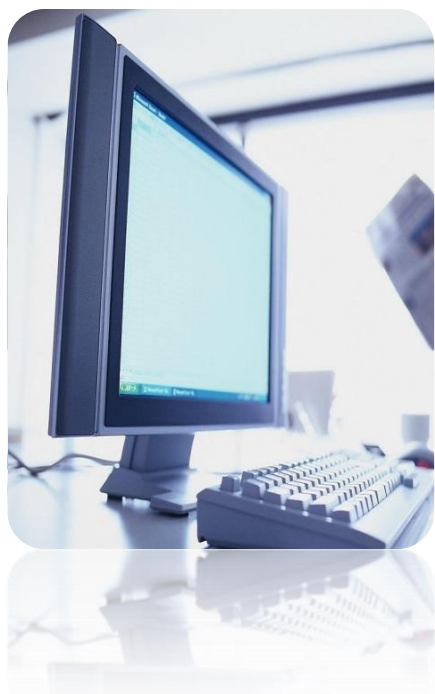


STRATEGIC INVESTMENT OPPORTUNITIES BASED ON CLEAN TECHNOLOGY & FINANCIAL INNOVATION

Hunan Low Carbon Technology Venture Capital Fund



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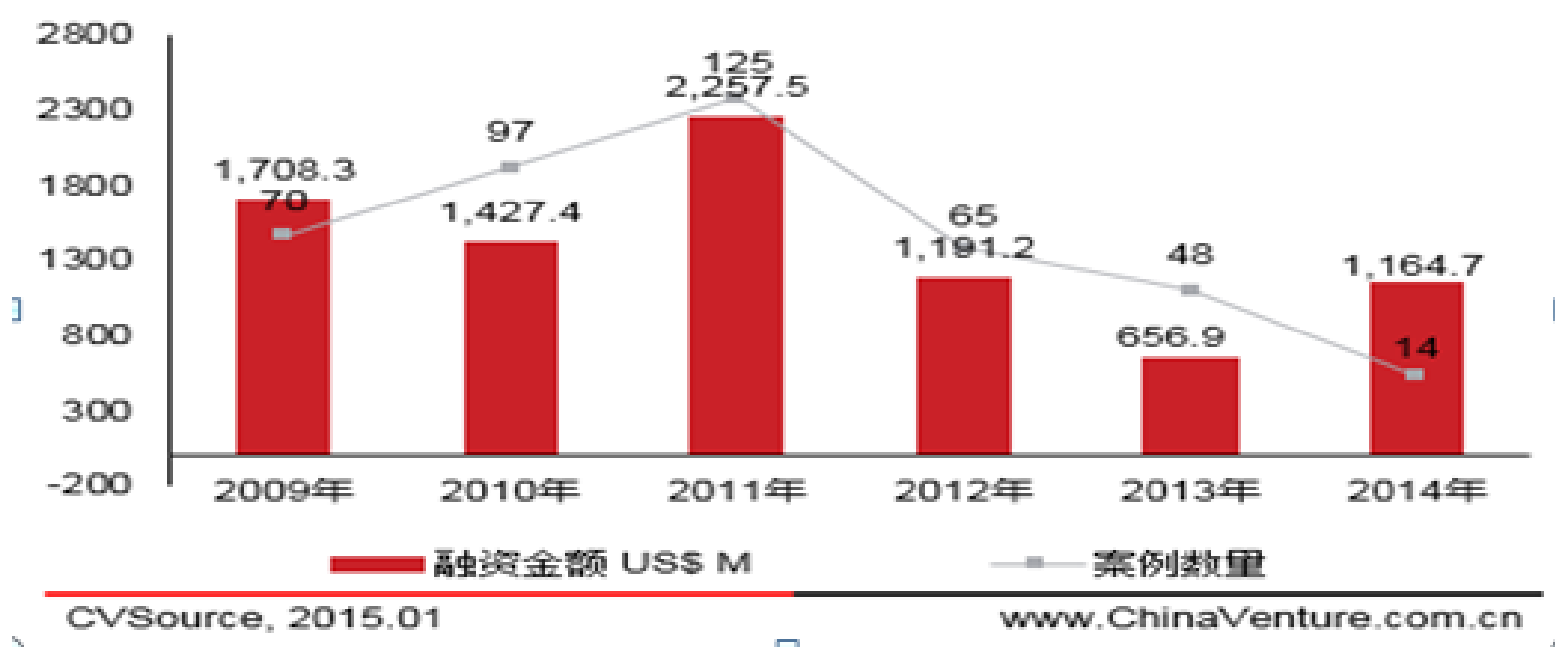
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Sector & Policy

2014 Cleantech Investment Landscape

- After two years of downturn, clean technology industry showed a warming trend in 2014.
- According CVSource Statistics, there were 14 disclosed cleantech financing cases, decreased by 71% compared to 2013, with total financing of \$ 1.165 billion, increased by 77% compared to 2013. With the IPO restarting, 12 clean technology companies were successfully listed, a significant increase compared with 2013.

VC/PE in Cleantech from 2009 to 2014



- **Focused Sectors**

- Battery & energy storage, clean energy, and energy-saving & environmental protection.**

- Wherein, the Battery & energy storage sector is the most active one, with a total financing of \$ 631 million, the number and amount accounting for respectively 50%, 54.2%. Followed by the clean energy industry, the number and amount ratios were 43%, 42.4%.

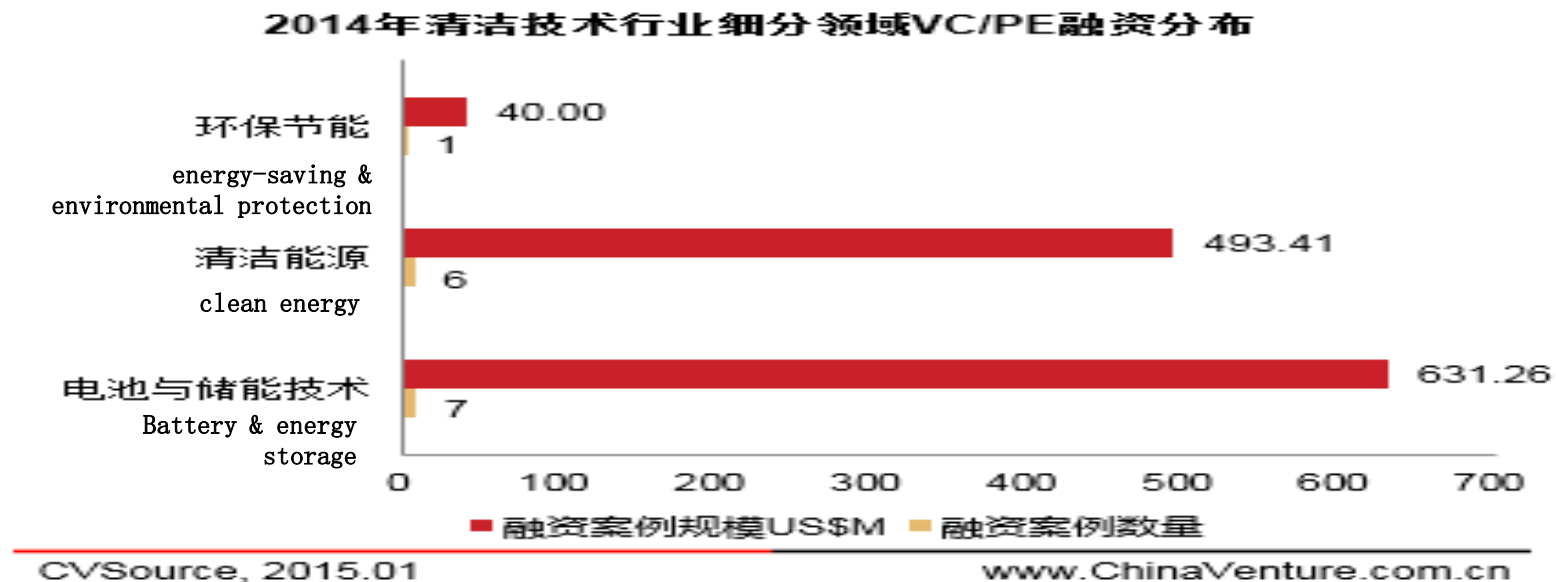
- **Cases**

- Largest domestic cleantech VC / PE financing in 2014:

- CDH invested \$ 600 million in Nanfu Battery, the product of which accounted for 70% of the brand alkaline battery market sales.

- The second one:

- GIC, Value Partners Fund, OZ, Hillhouse Capital and Guangzhou City Development Fund injected about \$ 450 million in Guangdong Nuclear Power.



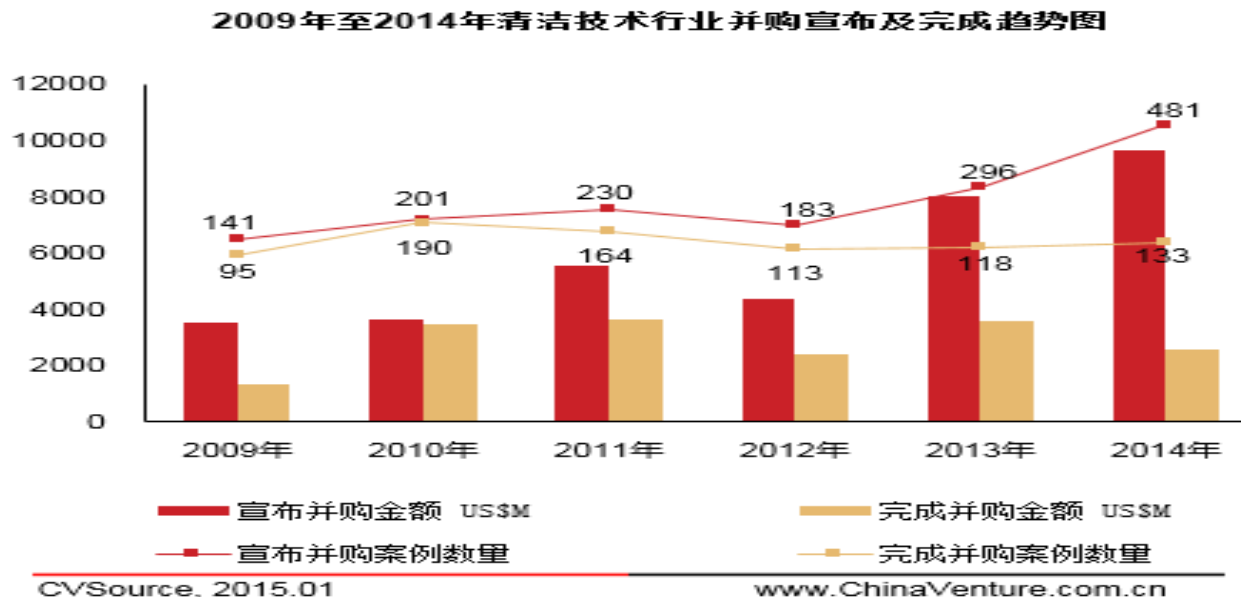
- **Cleantech IPO:**

According CVSource Statistics, 12 clean technology companies were successfully listed in 2014, increased by 1100% compared with 2013, raising \$ 4.321 billion, increased by 65.58% compared with 2013. In addition, 5 of them has the background of VC/PE.

- **M&A**

There were 481 announced transactions, increased by 62.5% compared with 2013, with transaction amount of \$ 9.679 billion, increased by 20.9% compared with 2013. There were 133 completed transactions, increased by 12.71% compared with 2013, with transaction amount of \$ 2.571 billion, declined by 28.73% compared with 2013.

The largest one: Fujian Nan Fang acquired 100% of Fujian Fu Neng Energy with \$ 258 million, and acquired 75% of Jinjiang Natural Gas with \$ 204 million. Overall, the number and amount of the announced M & A transactions have reached maximum in recent years. Although the completed transaction number has gone up, the completed transaction scale suffered a cold again after the warming up of 2013.



Integrated Values for Clean Tech Entrepreneurs

**We are more than a financial investor,
we partner along growth with our clean
technology entrepreneurs!**

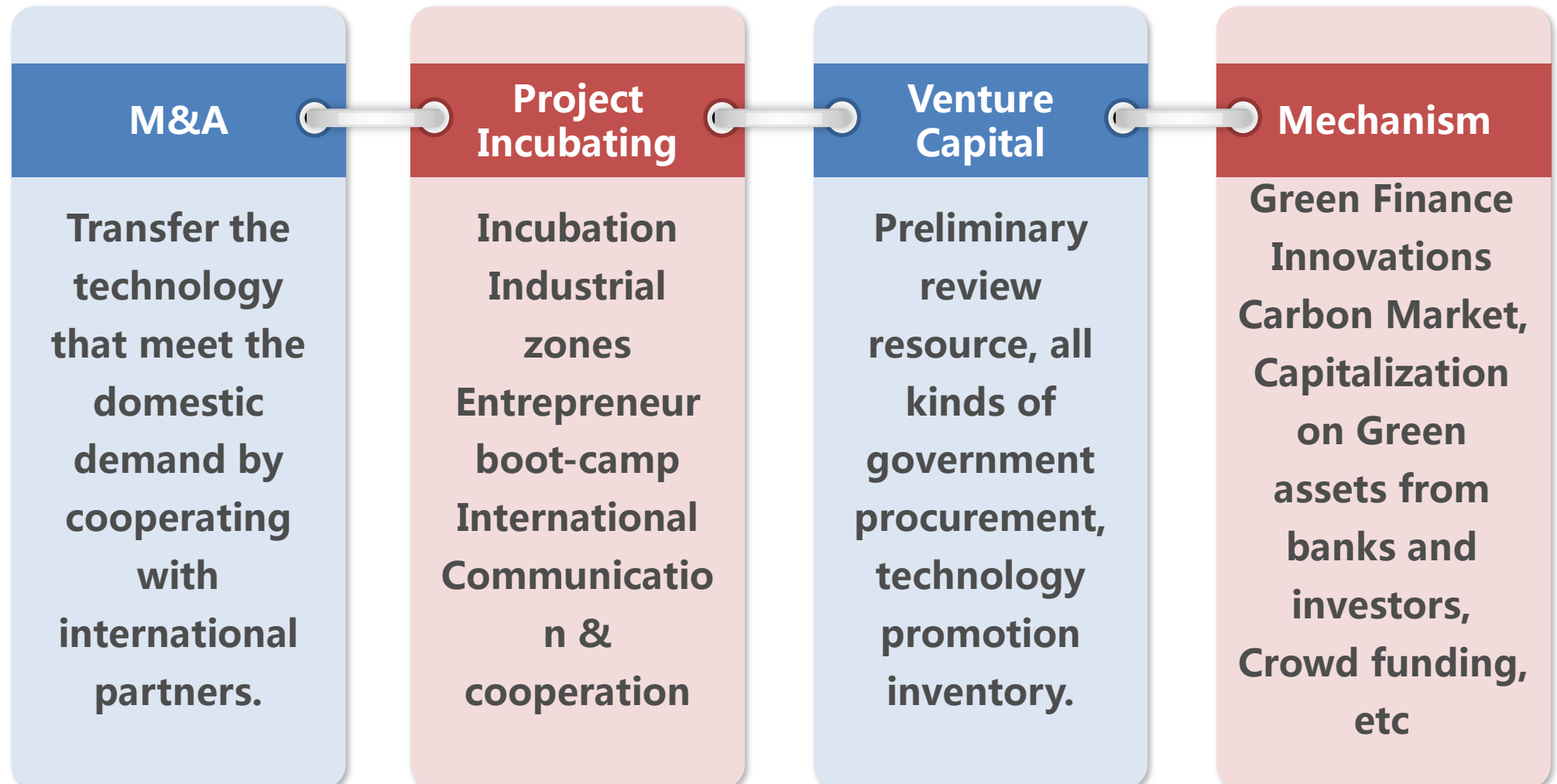
Clean Tech Companies are characterized with :

- * New technologies, yet to prove
- * Large R&D investment in terms of funds and time
- * Primarily Long term projects, lasting but low financial return on operation
- * Replacement of traditional operations, bringing both opportunities and obstacles
- * Close combination of technology and business operation, like IT industry 20 years ago

Clean Tech Entrepreneurs Headaches

- * Yet-to-boom Market demands, either out of policy push from government or economic needs from customers
- * Under-funding from both public and private sources, partly due to mismatch between government's funds and real company demands
- * Insufficient /inefficient fund-raising channels
- * Difficulty in human resources
- * Difficulty in market promotion and expansion

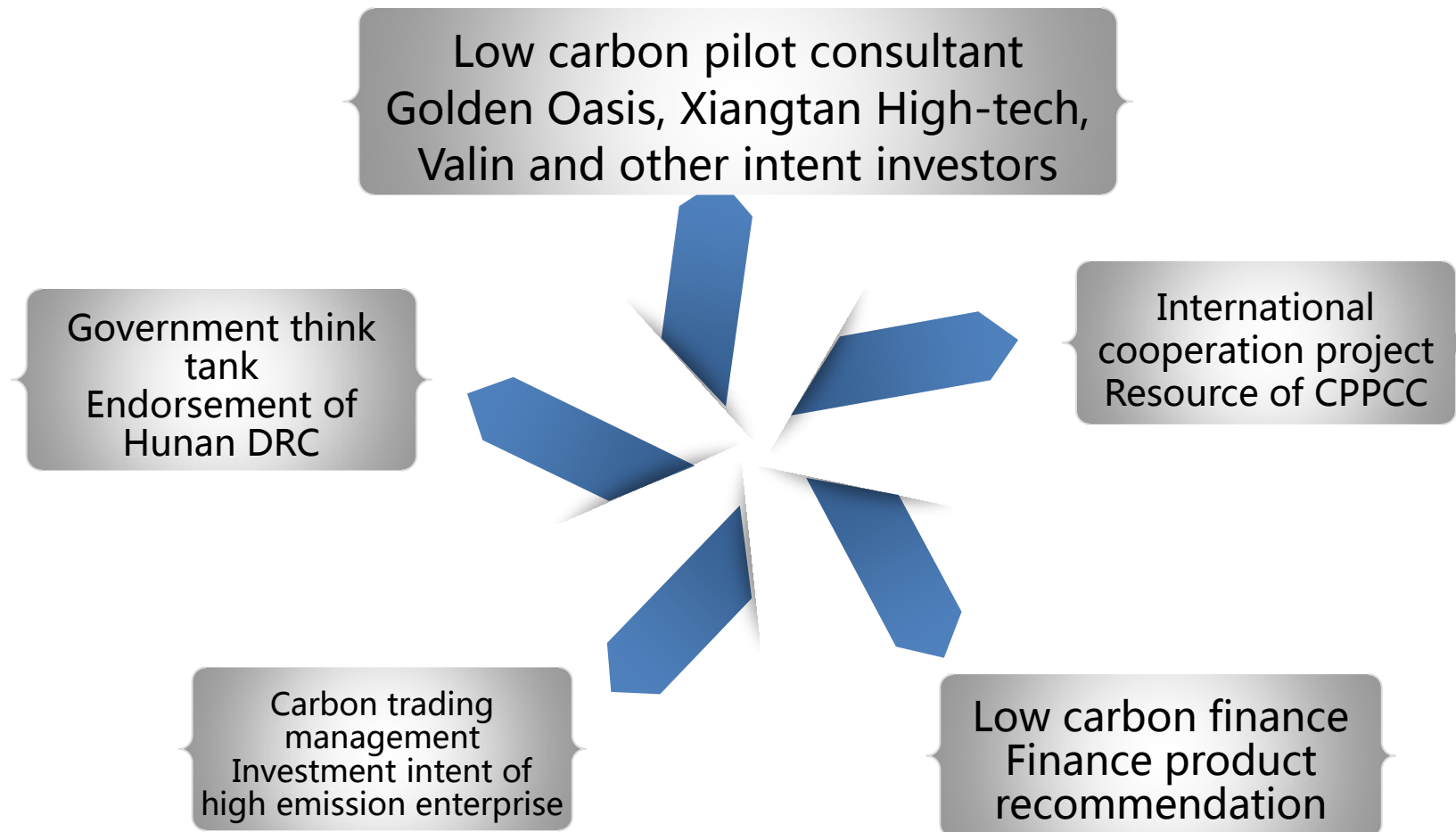
Financial service vs Investment





Financial service vs Fundraising

Local investor network and strong endorsement of the local government will help overcome the obstacles of first phase fund.



Financial service scope

Venture mentor

- Provide early guidance and incubation for low carbon startups, which will be achieved by boot camp and incubator.
- Included in four 'one' work plan , implemented in Golden Oasis New Industrial Zone

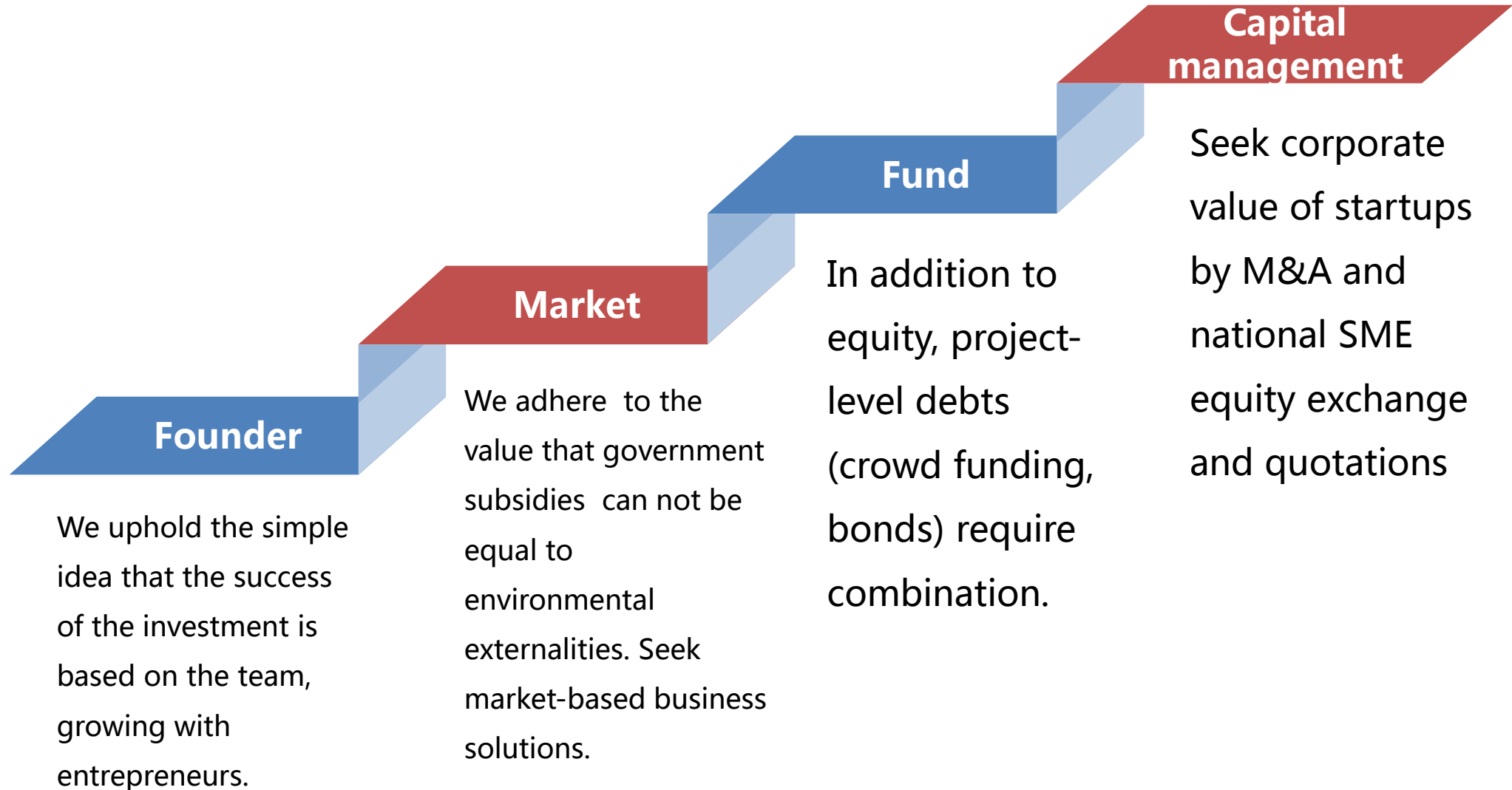
Transaction mentor

- Provide international M&A opportunities for large scale enterprise in Hunan, which will be achieved by cooperation with international partners.
- IPEX, Carbon Trust, Korea Green Technology Center

Financing mentor

- Provide financing service, including equity/loan, to low carbon projects, which will be achieved by fund, joint investment, carbon crowd funding.
- Carbon credit policy innovation, internet finance platform, strategic equity fund.

Financial service vs Post management





Fund Introduction

Rooted in Hunan Province, the fund witnesses the cooperation between ADB and local government in past three years!

扎根本土，互联国际，亚行与湖南省合作三年的积淀作品！

Background

- * Sector: 15% annual growth of low carbon GDP nationwide. 4.5 trillion RMB forecasted in 2015. Hunan province reports 200 billion CNY, ranking the top ten nation wide.
- * Policy: National PPP Encouraging Policy. The Central and Hunan governments will invest 100 million RMB. (新兴产业创投计划参股创业基金)
- * Opportunities: As one of the two chosen low carbon promotion pilot provinces, Hunan will receive a package of ADB supports including policy advice, capability development, financial access, international resources etc.
- * Advantages: Hunan-based experts team and fund management team, competitiveness in green investment



Summary of the Fund

1st low carbon-focus VC fund in Hunan

- * RMB 300 million for Fund 1
- * Hunan based and focus; nationwide opportunities
- * Governmental funding

Maximum Opportunities

- * new energy, energy efficiency, new materials, smart transportation, New-G manufacturing, modern agriculture
- * China is the largest clean technology market and strongly supported by government policies

Competition Edge

- * Low carbon policy and technology guidance
- * Green finance innovation & support
- * Marketing and business promotion advice
- * Management training support

Promising Return For LPs

- * Target IRR 30%+
- * 3+4 years fund life
- * Unique investment exit channels

Investment strategy

Stage	Inv. Size (10K RMB)	Quantity	%	Duration	Expected Return
Early	500-1500	2-3	20%	5-7 years	10x or above
Growth	2000-3000	6-8	60%	4-6 years	5-8x
Later	4000-5000	1-2	20%	3-4 years	3-4x
Sum	300million	8-10	100%		5-8x

- ✱ focus on early stage projects
- ✱ Areas: new-G manufacturing, new materials, clean energy, energy efficiency products, modern agriculture, internet and green high-tech
- ✱ Sourcing: at least 50% are Hunan-based.
- ✱ Exit: primarily M&A, IPO

Project pipeline

Project 1: a phase change air conditioning manufacturing

Sector	building and industrial energy saving			
Channels	recommended by financial agencies for 14-month consulting service			
Investment highlights	1. 20 national patents 2. Cooperation agreement between the company and University of Colorado in the 4 th Sino-America energy efficiency forum in Sep. 2013. the company also held international energy efficient technology exchange forum 3. Abundant cash flow and sound business growth. The annual return broke 8 million CNY in 2014.			
Growth potential	time	2012	2013	2014
	Net profit (10 thousand CNY)	-400	600	800
Fund demand	30 million CNY, B round			

Project2: a chemical science and technology company

Sector	waterborne adhesive
Channels	2-month matchmaking of experts from Economic and Technology Commission, CPPCC
Investment highlights	1. over 10 national patents, is applying for international ones 2. huge market potential 3. cost-effective supply chain 4. high-tech talent introduced by local government
Growth potential	no market return temporally. Its development depends on government policy subsidies.
Fund demand	5 million CNY, angle round (need on-going attention)

Project reserve

Project 3: a energy saving science and technology company				
Sector	distributed energy resources, waste recycling			
Investment highlights	1. use gasified biomass, solar energy and sludge to drive the energy plant 2. established well and listed in Hunan equity exchange 3. mature marketing team and central south market network			
Growth potential	time	2012	2013	2014
	Net profit (10 thousand CNY)	-1400	-500	400
Fund demand	above 10 million CNY, B round			

Project 4: a electromechanical science and technology company				
Sector	recycling equipment, battery recovering			
Channel	recommended by environment and resources department of DRC			
Investment highlights	1. waste battery recycling technology and integrated equipment have been put in use, being the first company in China to realize maintenance-free battery 2. 2 patents for invention, 11 patents for utility and 1 for appearance			
Growth potential	time	2012	2013	2014
	Net profit (10 thousand CNY)	600	1100	300
Fund demand	above 10 million CNY, B round			

Project reserve

Project 5: a environmental protection company outside Hunan	
Sector	methane collection, clean energy
Channel	Recommended by investor
Investment highlights	1. the first company that use world-advanced purification system to realize landfill gas recycling. It was awarded the pilot project issued by Ministry of Housing and Urban-Rural Development and passed the inspection. 2. the core technology can be widely applied in biomass methane purification 3. both local and international team
Growth potential	The first project has yet put into use, but it is expected to reach over 200 million CNY
Fund demand	above 10 million CNY, A round

Governance System

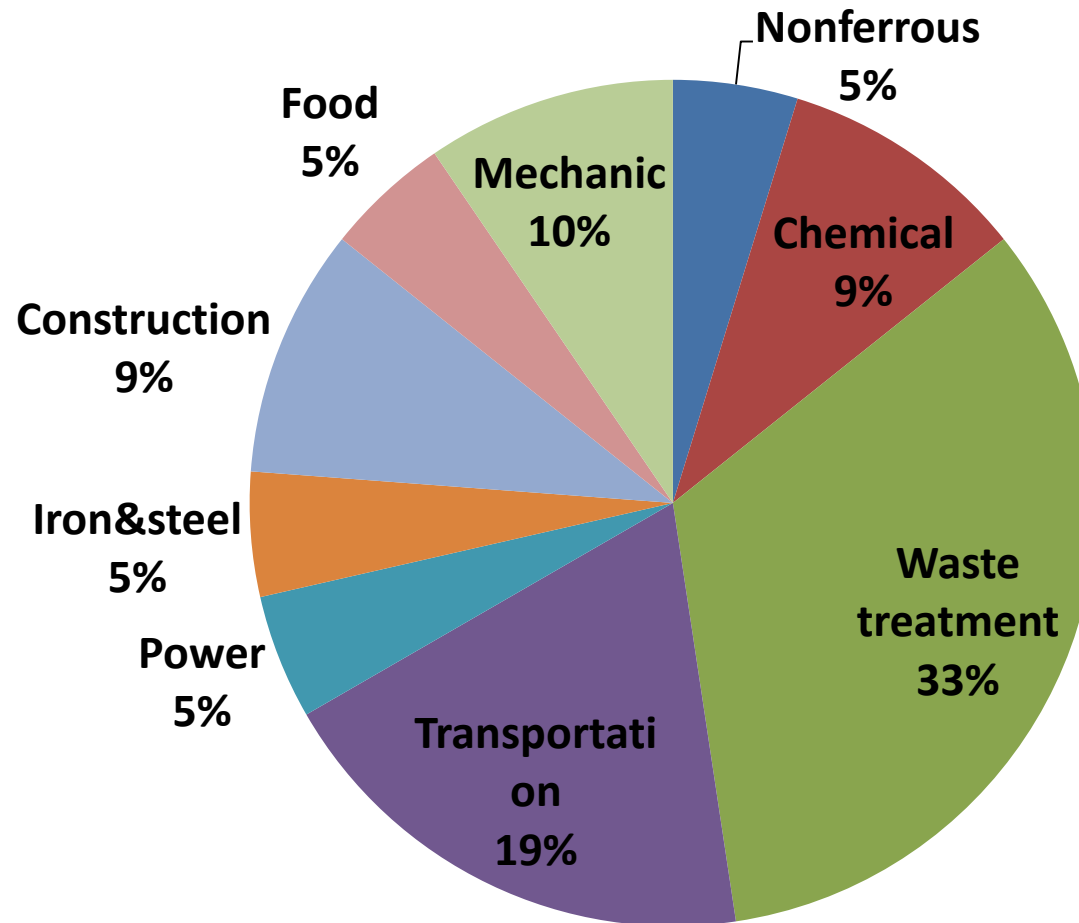
**Deal Sourcing, Decision Making,
Risk Control, Value-adding**

Deal Sourcing

- Sourcing through government channels – PDRC, Low Carbon Center, Env. Protection Commission, Sci. & Tech. Commission, industrial parks, etc
- Sourcing through non-governmental partners – universities, research organizations, think tanks, financial institutions, agents, etc
- Sourcing through industrial & international partners – local enterprises & entrepreneurs, ADB, WWF, industrial peers, etc

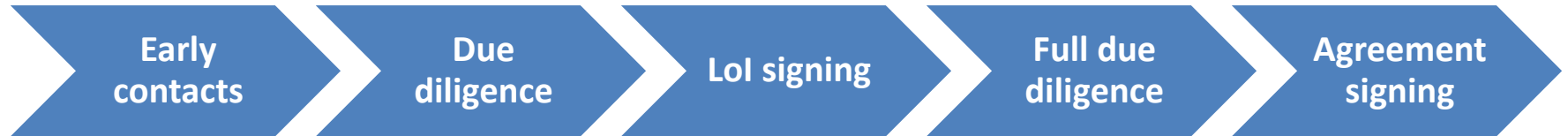


Project Categorization



- There are 121 projects in the pipeline, the category distribution is as above.

Decision Process

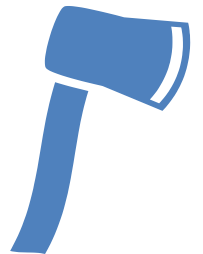
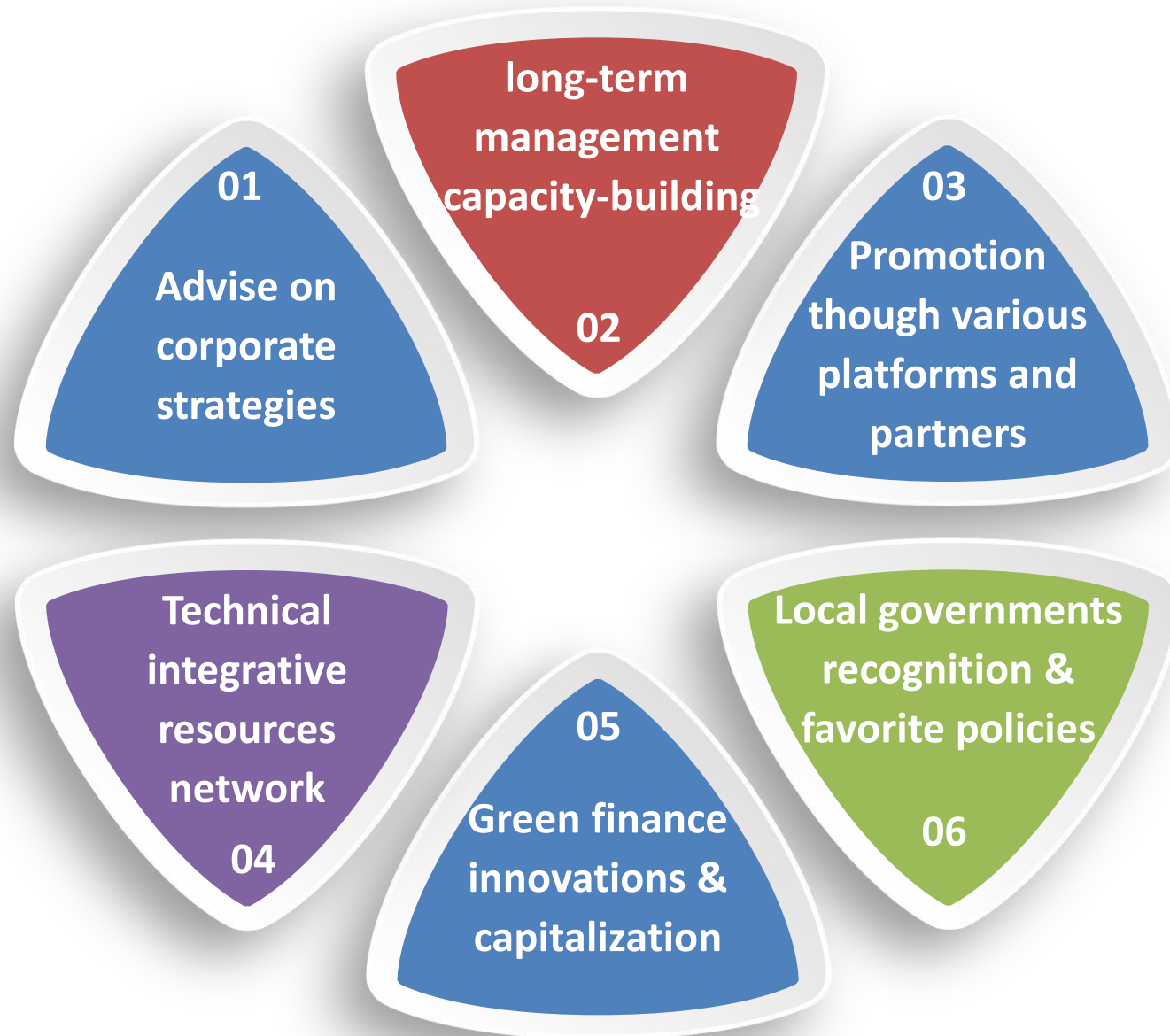


Time	1-4 weeks	1-2 weeks	1-2 weeks	1-4 weeks	1-4 weeks
Mission	Contact with entrepreneur; On-site visit; Internal discussion	Sector research; Entrepreneur interview; Customer interview	Corporate value evaluation; Contract negotiation	Corporate operation investigate; Financial due diligence; Legal due diligence	Contract modification; Legal documents signing
Content	Corporate basic information; Sector basic information	Sector deep research; Survey on sampled enterprises in chain; Survey on product and technology	Investment cost; Bet terms; Redemption terms	Deep operation investigate; Financial and legal due diligence; Other investigates	Investment agreement; Supplementary investment agreement
Document	Project profile; Interview record	Due diligence question list; Survey record; Project approval report	Investment Lol; Project implementation manual	Due diligence report; Third party due diligence; Investment proposal	Investment agreement; Supplementary investment agreement
Implementer	Project manager	Project manager; Executive partner	Project team	Project team and third party	Project team and lawyer
Decision-making	Track		Project Approval		Investment
Decision-making mechanism	Week meeting		Project approval meeting		Decision-making meeting

Risk Control

Pre Control	Risk Control	Post Control
<ul style="list-style-type: none"> • Strict screening procedure • Detailed due diligence • Full risk disclosure • High-standard industrial reference 	<ul style="list-style-type: none"> • Eligible investment agreement • Shareholder protection clause • Investment control 	<ul style="list-style-type: none"> • Strict monthly reporting • Key parameters monitoring • Post due diligence • Precaution for emergency
Legal risk/ Financial risk/ Operational risk/ Systematic risk		
Independent operation of risk control department		
Partner collective decision-making		

Value-added Services





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Innovative Low Carbon Center , Hunan

[www. lowcarbonhn.org](http://www.lowcarbonhn.org)