



ELION
An Eco-pioneer
with
Global vision



Elion Resource Group (Elion)
**Committed to Ecological
Environment Protection and
Green Finance**

National Award of
Poverty Alleviation

China Land
Greening Award

Global Dryland
Champion award
United Nations

⊕ Core Business: Ecological Restoration

We use biological and ecological techniques to repair degraded lands and do comprehensive management of water resources.



Three Lands



Desertification Land



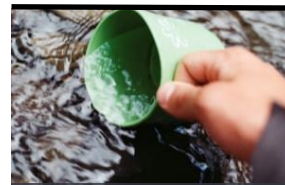
Rocky
Desertification Land



Saline-alkali and
Degraded City Land



One River



Brackish Water
Treatment



Comprehensive
River Renovation

Nearly 30 years' experience in desertification control

“World Dryland Champion”

The world's No.1 company in term of area of desert under desertification control

Desert Ecological Restoration

Utilize comprehensive measures, like sandification prevention & control and ecological planting, to improve eco-environment in deserts, meanwhile, develop ecological industry to drive local economy



Desert Ecological Restoration

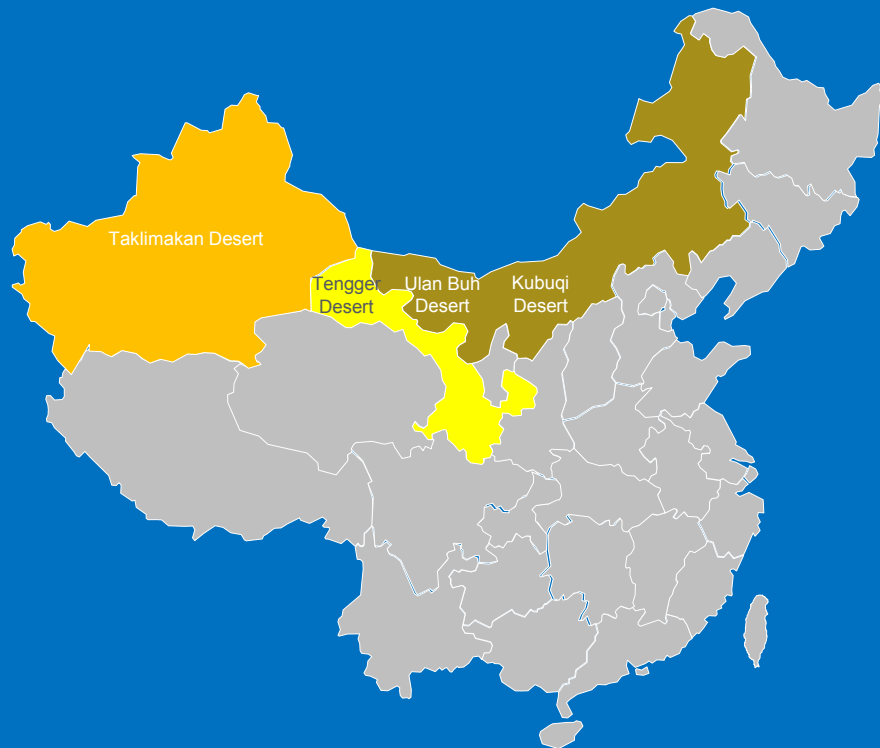
Business Model:

Elion + Farmers + Industry

Elion provides seedlings and technology, and order-based procurement. Farmers and pastoralists participate in this business through different patterns including using desertified land as capital to become shareholders, leasing desertified land for return, planting trees through labor input for compensation, and thus achieve mutually beneficial cooperation with Elion.

Core competences:

- Developed 127 eco-industrial technologies, cultivated and domesticated over 1000 drought-tolerant, cold-tolerant and saline-alkali-tolerant species;
- Independently innovated more than 100 kinds of planting technologies such as “air and water jetting”, “horizontal root growing technique for liquorice plantation”, “spiral punching method of tree planting”;
- Organized 232 farmer teams



Total desertification control area of 12,700 km² in Kubuqi Desert and Ulan Buh Desert in Inner Mongolia Autonomous Region, Taklimakan Desert in Xinjiang Uyghur Autonomous Region, and Tengger Desert in Gansu Province



Desertification
control

28
Years

Afforest
desert

6,353
km²

Desertification
control

11,000
km²

Poverty alleviation

100,000
people

Ecological
Return

Social Return

Poverty alleviation
since 18th CPC
National Congress

36,015
people

Economic
Return

Spiritual
Return

Created ecological wealth

Over **RMB460**
billion

Invested industry fund

Over **RMB38**
billion

Invested public welfare fund

Over **RMB3**
billion

Classic Model of Desert Ecological Restoration

Liquorice: Desertification Control + Ecological Industry

Excellent Varieties

Liangwai liquorice

Xibeigou liquorice

Red bark; Firm texture

Rich mealiness; High acid content

Scale Operation

725 GAP certificated liquorice cultivation bases, **largest in the world!**

Kubuqi
2,200,000 mu

Taklimakan
500,000 mu

Tengger
300,000 mu

Ulan Buh
1,200,000 mu

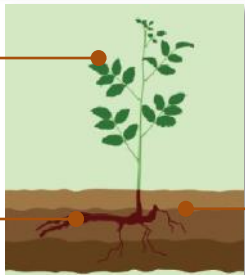
Mu Us Desert Shanghai
Temple
430,000 mu

Excellent
psammophyte,
medicinal herb,
cold-tolerant, drought-
tolerant, wind-tolerant,
leanness-tolerant
wind prevention and
sand fixation, soil
improvement

Advanced Technology

Fodder;
Wind prevention and
sand fixation

Medicinal herb;
Desertification control;
Soil improvement by
nitrogen-fixing of root
nodule bacteria



Innovation of
horizontal root
growing technique
for liquorice
plantation

**Elion's liquorice industry chain model:
Sustainable development model brings both
ecological and economic benefits.**

Ecological Restoration in Cities

- Comprehensive riverway renovation and water treatment
- Large-scale greening project
- Sponge City construction



Restoration Project for Degraded Forest of National Three-North Shelterbelt Forest Program (Zhangjiakou Section)



Afforestation projects in Chongli, Hebei Province, a skiing venue for 2022 Winter Olympics, and the Greeting Section of Jingzhang Expressway.



Bawang River Comprehensive Renovation Project in Ulanqab, Inner Mongolia



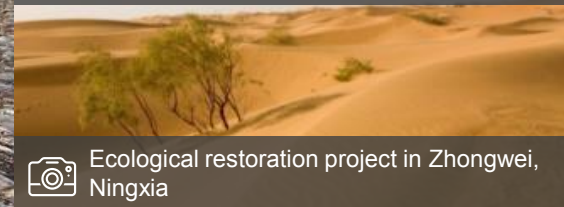
Fujian Ningde Ecological Restoration Project



Greeting Section of Jingzhang (G6) Expressway

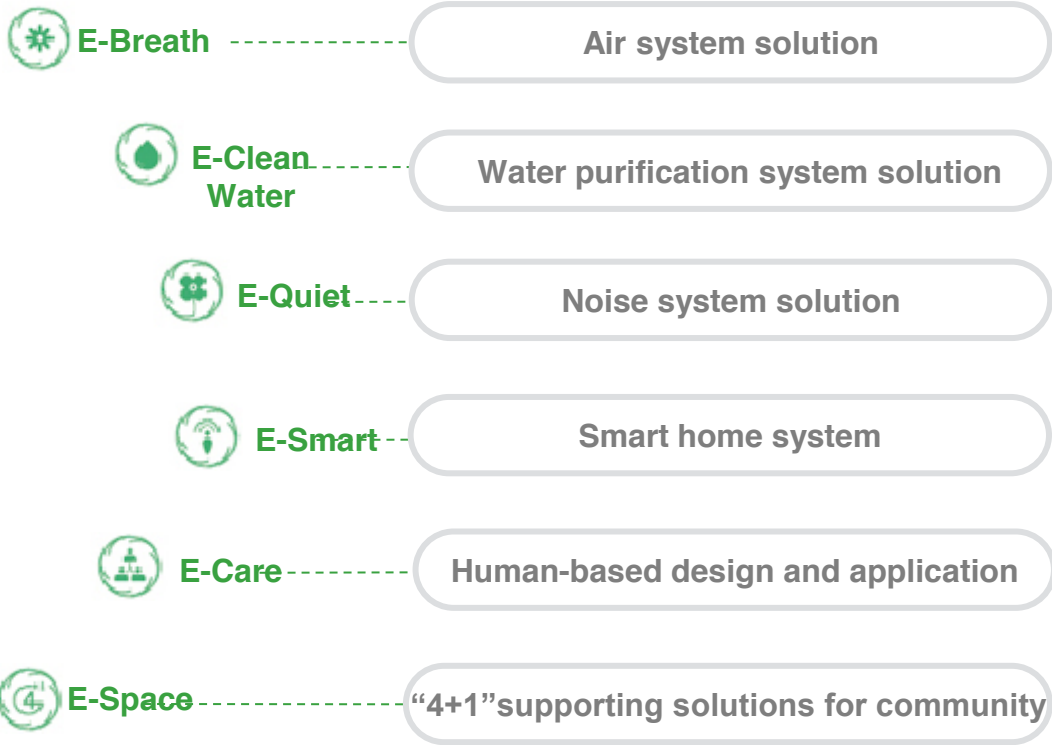


Total value of ecological restoration projects: RMB100 billion



Tianjin Elion International Ecological Island

The project is located in Sino-Singapore Tianjin Eco-city, Binhai New Area, Tianjin. As **the flagship work of the Elife + Eco 3.0 system**, the project launched six ecological health systems to solve the problems associated with air, water and noise. In addition, the integration of smart home system allows residents to pay utility bills, go shopping and book reservations without leaving house.



Flourishing Development of Elion Eco-towns in China

(10 Undergoing Projects)



Chongli Winter Olympics Eco-town
in Hebei Province



Guanting Reservoir Eco-town in
Hebei Province



Shizhu Eco-town in Chongqing
City



Lhasa Eco-town in Tibet



Wuzhou Eco-town in Guangxi Zhuang
Autonomous Region



Jinxiang Eco-town in Shandong
Province



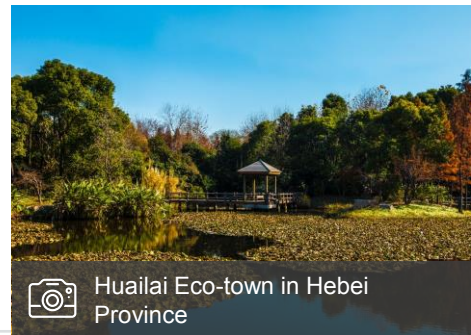
Kubuqi Eco-town in Inner Mongolia
Autonomous Region



Gu'an Eco-town in Hebei Province



Yongqing Eco-town in Hebei
Province



Huailai Eco-town in Hebei
Province

From Ecological Restoration to Eco-environment Amelioration and Landscape Design; From Desert to City, Creating Various Unique Health and Wellness Tourism Projects



Kubuqi Desert National Park

With 30 years of experience in desertification control of Kubuqi Desert, Elion built Kubuqi Desert National Park to protect restoration achievement. The park has been rated as 4A-class desert eco-tourism resort and been recognized as “Pilot Initiative” approved by the State Forestry Administration. It has won a succession of awards including “The World's Best Stargazing Site”, “The First Batch of National Low-carbon Eco-tourism Demonstration Zone” and “China Desert (Seven Star Lake) Autocross Training Base” etc.

Elion International Eco-tourism Island Resort

Located in the west of Jing Lake in Sino-Singapore Tianjin Eco-city, (SSTEC), Elion International Eco-tourism Island Resort with "One Lake, Three Islands " as its overall planning, is to build an eco-tourism park integrating eco-landscape, urban agriculture, family entertainment, water leisure, green dining etc. as one, providing tourists with high quality four-season recreational experiences.

After years of unremitting efforts, once waste-water reservoir has been transformed into a beautiful crystal lake today. Part of the polluted lake bottom sediments after scientific treatment has turned into an island nearby the lake. Newly founded eco-island project has land area of 42 hectares and water area of 118 hectares. In addition to purifying and improving the waters, a deep ecological restoration has been conducted to the previous landfill with saline-alkali soil, turning the waste into treasure.



Core Business: Clean Energy



Elion Clean Energy
(Stock Code: 600277)

**Focusing on Energy Saving and
Environment Protection
Protection and Control of Air
Pollution**



Clean Heating

Micro-fine Coal Atomization for smog reduction and coal control

"Micro-fine Coal Atomization" is an innovative technology independently developed by Elion for efficient and clean use of coal. The core technology is "micro-fine coal configuration and multiple vortex atomization", which improves the combustion efficiency to 98% and heating efficiency over 90%. Compared with traditional coal-fired boiler, this technology can realize coal saving over 30%, leaving no dust, coal, slag and soot.

Clean emission indicators of Micro-fine Coal Atomization technology far surpass those of natural gas-fired boiler.

| Emission Indicators | Natural Gas-fired Boiler | Micro-fine Coal Atomization Boiler | Project-implemented Provinces and Regions |
|--|--------------------------|------------------------------------|--|
| Soot Emission (mg/m ³) | 20 | 9.5 | Shandong Hebei Tianjin Jiangsu Jiangxi Zhejiang |
| SO ₂ Emission (mg/m ³) | 50 | 30 | |
| NO _X Emission (mg/m ³) | 200 | 87 | |

Source: Soot/gas real-time monitoring data in March 2015 on Elion Clean Energy Yishui Micro-fine Coal Atomization devices from Shandong Provincial Department of Environmental Protection

Eco-solar

Innovatively integrate solar photovoltaic and photothermal power generation and energy storage technology to develop eco-solar industry base



Fully utilize ample sunlight and space of desert to develop desert solar business

Implement innovative eco-solar industry characterized by “power-generating + planting + grassing + cultivation.”

Ecosystem: Cultivate plants and vegetables under panels (liquorice, sabina vulgaris, organic vegetables, etc.)

PV: Generate power from panels

Poverty alleviation: Elion + registered poor families + villages + county government

| Project | Capacity (MWp) | Schedule |
|--|----------------|--|
| Kubuqi Desert Project | 1000 | Completion of grid-connected power generation of 310 MWp Phase I project |
| Zhangbei Poverty Alleviation PV Project | 220 | Under construction |
| Zhangjiakou G6 Welcome Corridor PV Project | 240 | Under construction |

Clean Energy – Natural Gas and Intelligent Energy



Natural Gas

Elion is committed to natural gas business which is a representative of clean energy application. Since 2014, Elion began to invest in developing gas projects in mainland China, mainly covering industrial gas, autogas and civil gas.

Elion has more than 300 outlets in more than 100 cities of over 20 provinces in China.

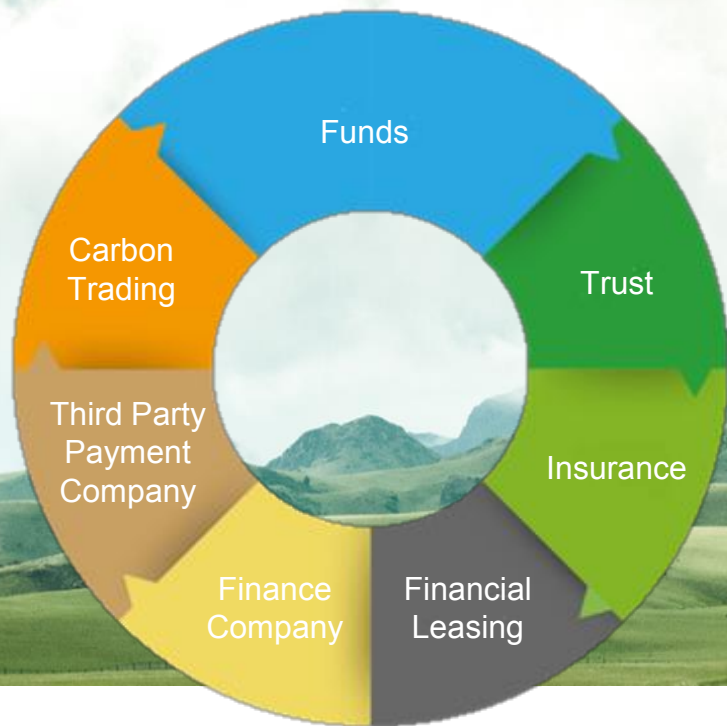
Intelligent Energy

By implementing “Internet +” strategy and intelligent management, Elion has built a safety-controllable, on-demand, real-time settlement and two-way transaction intelligent energy system.

Current implemented projects include Thailand Lisheng rubber industrial park, development and operation of intelligent charging facilities at the National Swimming Center, industrial energy saving project of recycling industrial park in Dalad Banner, Ordos and etc.



Core Business: Green Finance Service



RMB100 billion of assets in the portfolio

Elion is building a comprehensive financial service system featuring green finance, using financial leverage to promote the development of ecological industry.



Strategic Partners



Financial Partners

J.P. Morgan
Goldman Sachs
The World Bank
CDB
ADBC
ICBC
ABC
CCB
China CITIC Bank
Pin An Bank
China Bohai Bank
Baoshang bank



Enterprise Partners

Shenhua Group
Sinopec Group
Asia Standard
Wanda Group
Chint Group
Huiyuan Group
Transfar Group
Macrolink Group
JuneYao Group
Air Liquide



International Partners

UNEP
UNCCD
UNDP
IUCN
Saudi Arabia
Australia
Sweden
Thailand
Malaysia
Israel
Mongolia
EC
AUC
AmCham China



March 4, 2016, XI Jinping, general secretary of the CPC Central Committee, visited delegates of the Fourth Session of the 12th National People's Congress, including members of China Democratic National Construction Association and Federation of Industry and Commerce, and participated in the joint group discussions. He listened to suggestions of desertification control and poverty alleviation from WANG wenbiao, Chairman of Elion Resources Group, and said he will continue to care about this and provide his support. Yu Zhengsheng, Member of the Standing Committee of the Political Bureau of the CPC Central Committee and Chairman of CPPCC, also participated in the discussion.

WANG Wenbiao, Chairman of Elion Resources Group

- ◆ 2001: National May 1 Labor Medal
- ◆ 2005: National award for Outstanding Contribution to Green Landing
- ◆ 2007: Vice Chairman of the 10th session of All-China Federation of Industry and Commerce
- ◆ 2008: Member of the 11th CPPCC National Committee
- ◆ 2012: UN award for Excellence in Implementing Environment and Development
- ◆ 2013: Member of the Standing Committee of the 12th CPPCC National Committee
- ◆ 2013: UN distinction of World Dryland Champion
- ◆ 2015: UNCCD Land for Life Award
- ◆ 2015: Award for Outstanding Contribution to the 2022 Winter Olympics bidding
- ◆ 2016: National Award of Poverty Alleviation

Kubuqi's ecological wealth creation model attracts world's attention

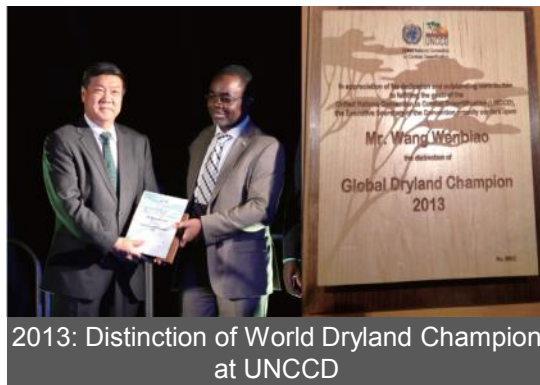
According to "The Report on Ecological Wealth Creation in China's Kubuqi Desert" at the UN Climate Change Conference in Paris on December 1, 2015:

- Outstanding achievement has been made in Kubuqi Desert by Elion to improve desert ecosystem, develop green industry, eradicate poverty in desert, and fight against climate change.
- Elion has created more than **RMB460** billion of ecological wealth, transformed more than **12,700 km²** of desert into green land, provided job opportunities to more than **100,000 people**, more importantly, created a successful model based on its experience--Kubuqi's ecological wealth creation model.



Following the nuclear power and high-speed rail,
Desertification Control is hailed by media as "the third business card for China to the world".

From 2007 to date, Elion has successfully hosted five times of Kubuqi international Desert Forum, which is the only desert forum worldwide dedicated to the world's desertification control and desert economic and cultural development, and has been put into a United Nations resolution as an important platform and means to combat desertification worldwide.



2013: Distinction of World Dryland Champion at UNCCD



2012: Award for Excellence in Implementing Environment and Development at United Nations Conference on Sustainable Development



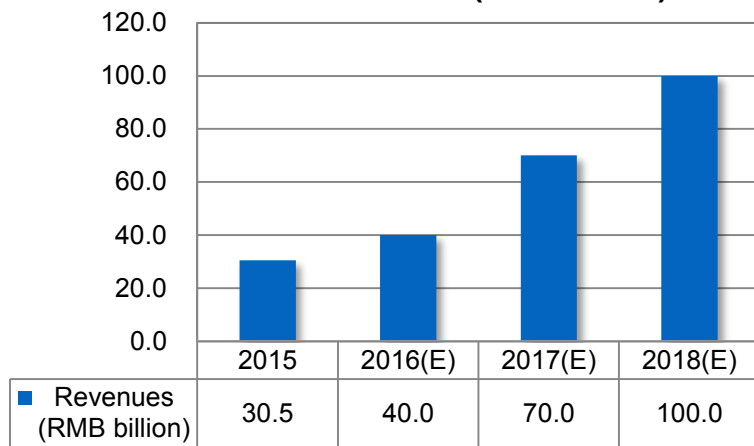
2014: Launch of the UNEP Kubuqi Desert Eco-economic demonstration



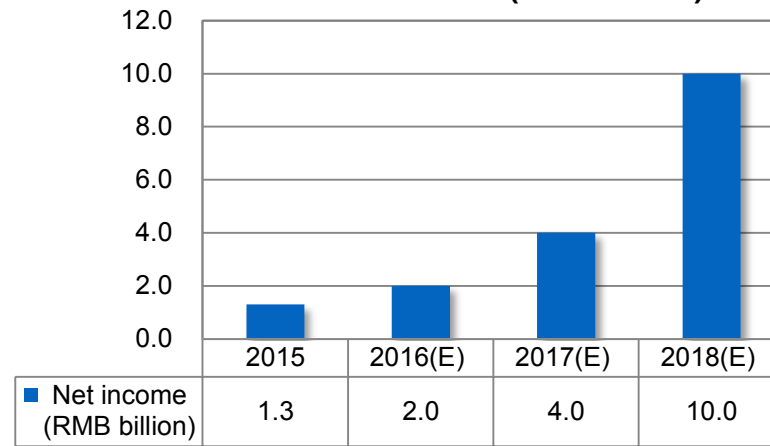
2015: UNCCD Land for Life Award

Eco-pioneer Aims at Fortune Global 500

Revenues (RMB billion)



Net income (RMB billion)





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Winning together with customers
with kindness and honesty