

Startup Investment on Energy & Environment for China Market

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China



1.3 Billion Population
21% of World Population
7% of World's Freshwater Supplies
22% of World Energy Consumption
68% of China Energy came from coal

Why do you care?



**20% pollutants
come from China**

**Affect World
Food Supply**

**36% sulfur dioxide
27% nitrogen oxide
17% black carbon
22% carbon monoxide**

**Land Pollution
Water Pollution
Air Pollution**

Food Shortage

Energy Crisis

- ▶ Enough coal reserves to last another 28 years compared to US reserve for 264 years
- ▶ Renewable energy is limited and not sufficient for energy consumption

- ▶ Many rivers are severely polluted by industry, pesticides, and fertilizers
- ▶ Water resources are scarcer because of climate change and because of usage by large coal-fired power stations.

Water Crisis



ONLY 8 MAJOR CHINESE CITIES MET NATIONAL AIR QUALITY STANDARDS IN 2014

SOURCE: CHINESE MINISTRY OF ENVIRONMENTAL PROTECTION



- ▶ Nearly 300 cities suffer from heavy air pollution
- ▶ > 1.6 Million people die per year from breathing toxic air
- ▶ Air pollution costs China \$11 Trillion economy = 6.5% China GDP in lost productivity

LHASA

KUNMING

SHENZHEN

HAIKOU

HUIZHOU

ZHUHAI

FUZHOU

ZHANGJIAGONG

Smart Grid/
Smart Energy

Smart Retail

Smart Agriculture

Internet of Things



Smart City

Smart Health

Smart Mobility

Smart Home

Open Data



Smart Building

Smart Farm

Smart Factory



Industrial Internet of Things (IIoT)

COMPANIES BUILDING SMARTER CITIES

The infographic is organized into several categories, each with a rounded rectangular border. The categories and their associated companies are as follows:

- PARKING:** PARKWHIZ, PARKiFi, SpotHero, ANAGOG (The Parking Network), SPOT., spaceeek, MeterFeeder.
- GRID/ENERGY:** Telensa, enbala (POWER NETWORKS), GREENSYNC, GRIDCURE, bpl, Trilliant, semitech (SEMICONDUCTOR), varentec, Utilidata.
- DATA DRIVEN URBAN PLANNING:** placemeter, amigacloud, LocalData, Neighborland, azavea.
- SMARTER TRANSPORT:** sobi (SOCIAL BICYCLES), Zagster, Yunmake, MOJIO, Shuttle, chariot, vinli, ATHER, Zebie, BRIDJ.
- WATER USAGE/QUALITY:** AYYEKA, rachio, VALOR WATER ANALYTICS, WaterSmart.
- WASTE MANAGEMENT:** zerocycle, AMCS, enevo.
- ENVIRONMENTAL SENSORS:** BREEZE, wimobo, BreezoMeter, UNDERSTORY, DAS BOX, aclima.
- TRAFFIC/TRANSIT DATA:** INRIX, BirdsEye, TransitScreen, Citymapper, miovision (rethink traffic), metrotech (driving information), moovit, ma3route, urban engines.
- CONNECTIVITY:** VENIAM (THE INTERNET OF MOVING THINGS), BRCK, LQD, JANA, FILAMENT.

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**1960
Los Angeles
Pollution**



**Hopes
for China**



**1950
London
Pollution**

