

## PRF construction and site selection Plan in the U.S

### 1. Building Background and Technology

PRF stands for the technology of waste plastics recycled petroleum process, including equipment manufacturing, engineering installation and equipment commissioning, system integration and automation control . Our team has its own intellectual property rights and have been worked hardly for more than 20 years, with international leading level. After long-term research, the key technology "bottleneck" of reclaiming petroleum by waste plastics has been solved. To cut off the organic chain of waste plastics in atmospheric reaction unit by catalyst and reduce to low ( small) molecular hydrocarbons by catalytic recombination. This skill breaks through four major technical problems in the research field of waste plastics recycled petroleum ( PRF) in the world, such as compound catalyst, process control, safety control and pollution control, and realizes the industrialized production of waste plastics recycled petroleum ( PRF) resources.

### 2. Raw materials

1) Plastic waste from municipal solid waste in the U.S. The stock and increment of municipal solid waste in America are huge. Can cooperate with governments all over the United States, garbage industry associations, environmental groups, waste recycling treatment and classification companies, etc.

2) Industrial waste plastics. Recycling paper, packaging and logistics, aviation, railways, plastic and chemical products, medical treatment and other industries will produce a large number of waste plastic, can cooperate with them.

3) Stale refuse landfill site. There is a lot of waste plastics in the stale rubbish. Soil remediation can be carried out in cooperation with landfill sites, using stale plastics to refine gasoline and diesel.



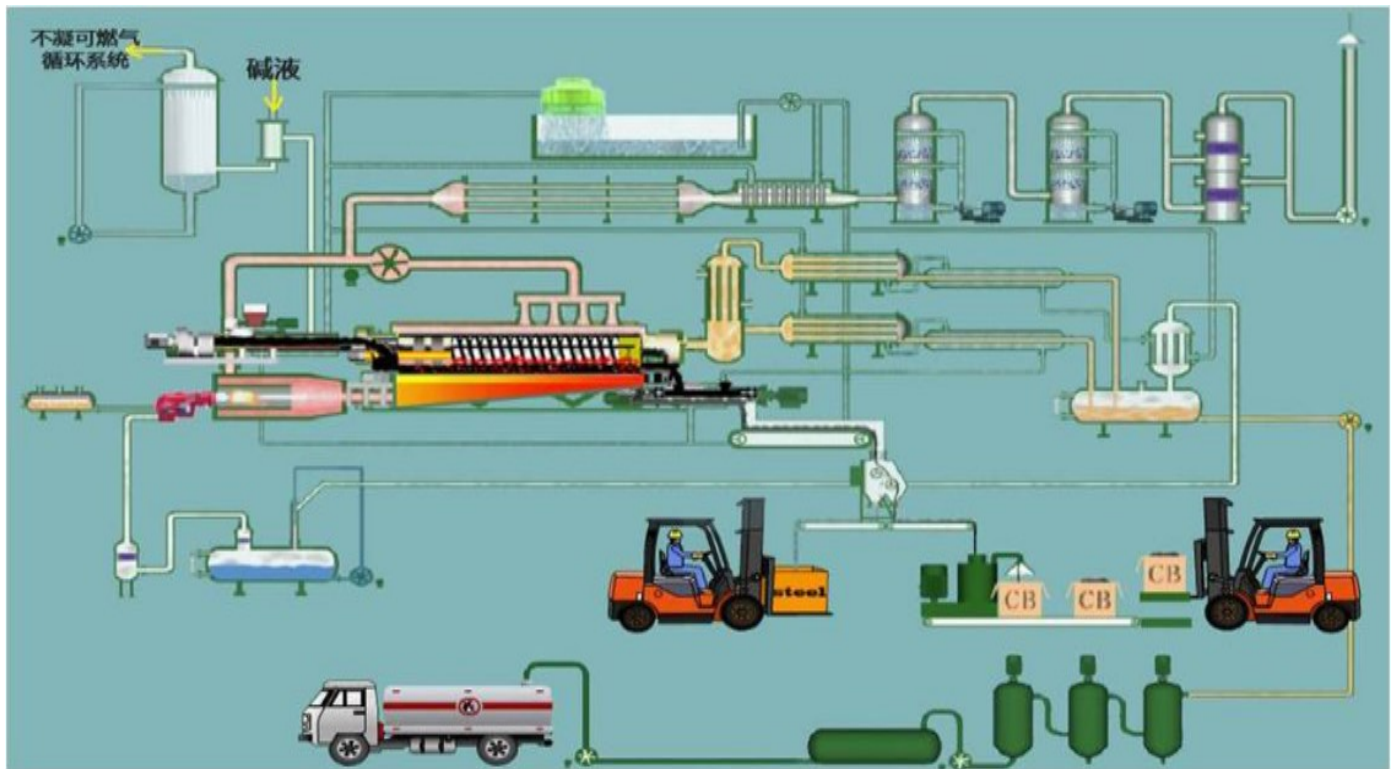
### 3. Project Submission for Approval

1) Government approval: project initiation, land procedures, environmental assessment, safety assessment, planning permission, start-up permission, etc.

2) Product Sales License: With the approval of the local government, the company may sell gasoline and diesel oil produced by the factory.

3) Encouraging policies: Obtaining various incentives from the government, such as enterprise subsidy policies, preferential policies on factory land, garbage disposal subsidies, environmental improvement subsidies, encouragement policies for scientific and technological progress, taxation policies, etc.

4) Restrictive Policies: Are Foreign Technology Entry Restrictions in the U.S.? Is there any restriction on the production and operation of refined oil? Is the waste disposal qualification easily available?



#### 4. Planning steps and time for the construction of the factory

- 1) Factory planning (2 months): preparation of project feasibility study report, Project planning and design (including design and construction drawings for factory roads, utilities, public works, underground pipe network, office, warehouse, factory building, tank area, equipment layout, installation, etc. After obtaining the land red line map provided by the government
- 2) Plant Construction (6-8 months): The construction will commence after the planning has been approved by the local government department.
- 3) Equipment processing (6 months): After factory design is completed, custom equipment can be started, the processing cycle is about 6 months.
- 4) Installation of equipment (4 months): The equipment enters the field, carries out the installation and construction of equipment, devices, pipes, public buildings, etc
- 5) Commissioning and production of equipment (2 months): on-site commissioning of the whole set of equipment and commissioning of production test.

#### 5. Total investment size: 18 million USD

##### 1) Investment in construction

1. Land 10 acres, approx. USD 1.7 million
2. It is advisable to preprocess 2,000 square meters for capital construction materials and 5,000 square meters for raw materials warehouse to be more than 8 meters high, The 8000m<sup>2</sup> main workshop of the main building requires 5:3 to be more suitable and the height exceeds 11m high. The conditions of road and public facilities, water, electricity and gas communication, sewage treatment and so on are satisfied. The underground pipe network project is about US\$3 million
3. Equipment (5 production lines), about USD 11 million





6. Sales income (calculated according to 60% of the U.S. waste plastic oil production rate)

(1) Diesel fuel: 12,000 tons \* \$662/t = 7.94 million

(2) Petrol: 6,000 tons \* \$851/ton = \$5.1 million

(3) Carbon black: 1500 t \* \$258/t = 380000

Total income: 794 + 510 + 38 = \$13.08 million

7. Cost components:

(1) Raw materials 30,000 tons \* \$30/ton = \$900000

(2) Electricity costs 30,000 tons \* 200 degrees \* \$0.1 yuan / degree = 600000 yuan

(3) Depreciation Equipment \$11 million + Land \$1.7 million + Infrastructure \$3 million = \$15.7 million Based on 10 years' depreciation, \$1.57 million/year.

(4) Manual (15 persons per shift in three shifts) 45 persons \* \$40,000 per person per year = \$1.8 million

(5) Catalyst 30,000 tons \* \$16/ton = \$480000

(6) Administrative expenses 30,000 tons \* \$32 / ton = \$960000

(7) Financial investment costs are calculated at 10% annual interest: 1800 \* 10% = \$1.8 million Total cost = 90+60+157+180+48+96+180 = \$8.11 million

8. Total profit: 1308-811 = \$4.97 million

9. Investment payback period (static) 1800/497 = 3.6 years