

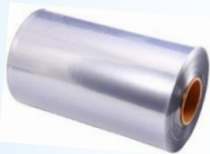


GAS-CHEMICAL INVESTMENT PROJECTS FOR INTERNATIONAL COOPERATION, PLANNING BY STATE CONCERN "TURKMENGAS"



www.oilgas.gov.tm
turkmengaz@online.tm

DEEP PROCESSING OF NATURAL GAS





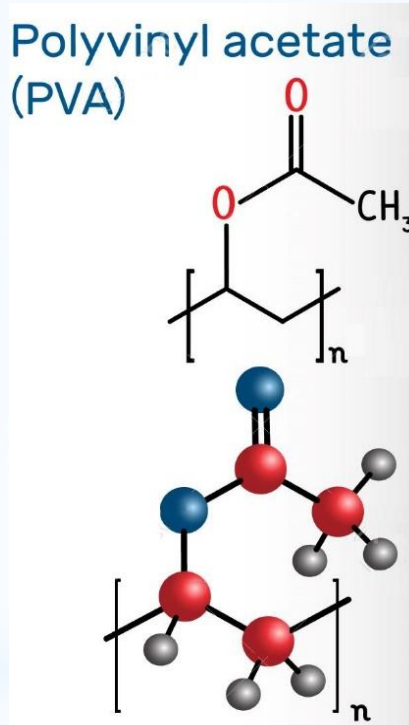
**Construction of gas-chemical complex
for polyvinyl acetate production (PVAC)**

Raw materials supply for gas-chemical complex for polyvinyl acetate production in Dashoguz region (northern part of Turkmenistan)

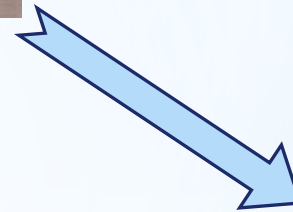
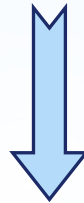
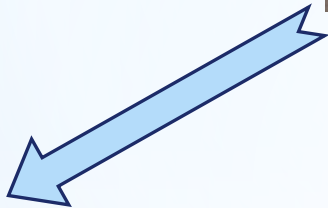
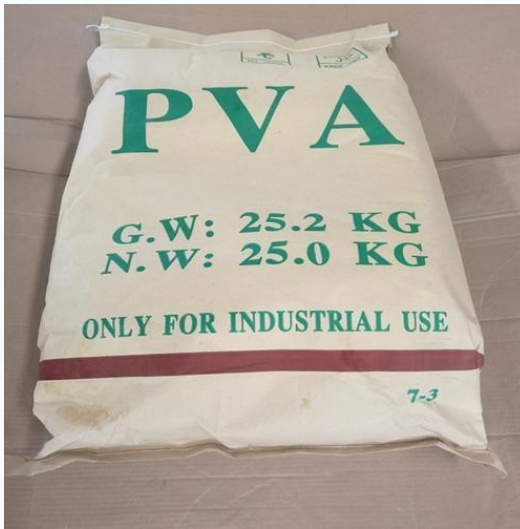


- ✓ Ethane gas is the main raw material for polyvinyl acetate production:
- ✓ Projected feed gas volume: 1,8 billion cubic meters per year
- ✓ Projected annual raw material capacity (ethane): 94,5 thousands tons per year

Products that will be manufactured by the Gas-chemical complex for polyvinyl acetate production



Polyvinyl acetate – 71 000 tons per year



Polyvinyl acetate products will be used in industrial branches like as: construction, electricity and etc.



**Construction of gas-chemical complex
for methyldiethanolamine (MDEA)
production**

Raw material supply of gas-chemical complex of Balkan region for methyldiethanolamine (MDEA) production



- ✓ Ethylene, methanol and ammonia will be processed in this gas-chemical complex for methyldiethanolamine (MDEA) production as major raw materials. It is mandatory to mention that raw materials needed for this complex are supplied from nearby production plants.
- ✓ 3000 tons of ethylene and 2000 tons of methanol needed for this construction complex will be supplied by the nearby located “Polyethylene and polypropylene manufacturing complex” which will be handed over for exploitation in the near future and “Complex of manufacturing polymers from natural oil” planned to be constructed, and 1 500 tons of ammonia will be supplied by the State Concern «Turkmenhimiya»

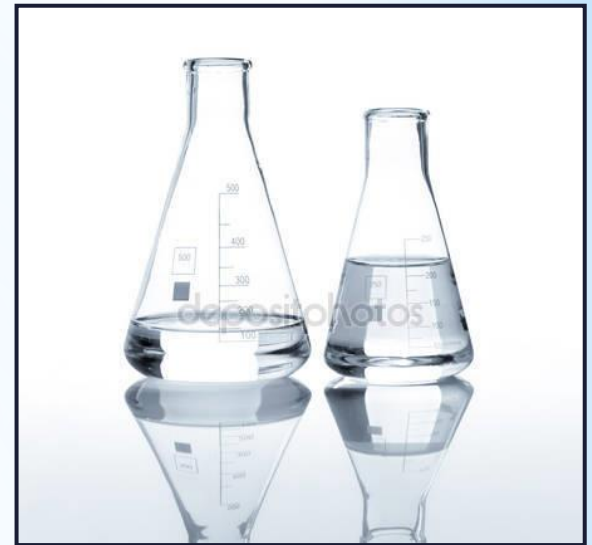
Product to be produced in gas-chemical complex for methyldiethanolamine (MDEA) production:



Methyldiethanolamine- 6 000 tons per year

Industrial uses of products produced in gas-chemical complex for methyldiethanolamine (MDEA) production

- ✓ **Methyldiethanolamine (MDEA) product is widely used in refining natural gas in oil-gas sector, as an emollient in textile industry and in other productions**
- ✓ **Methyldiethanolamine product is sent to consumers in specially packed packages.**



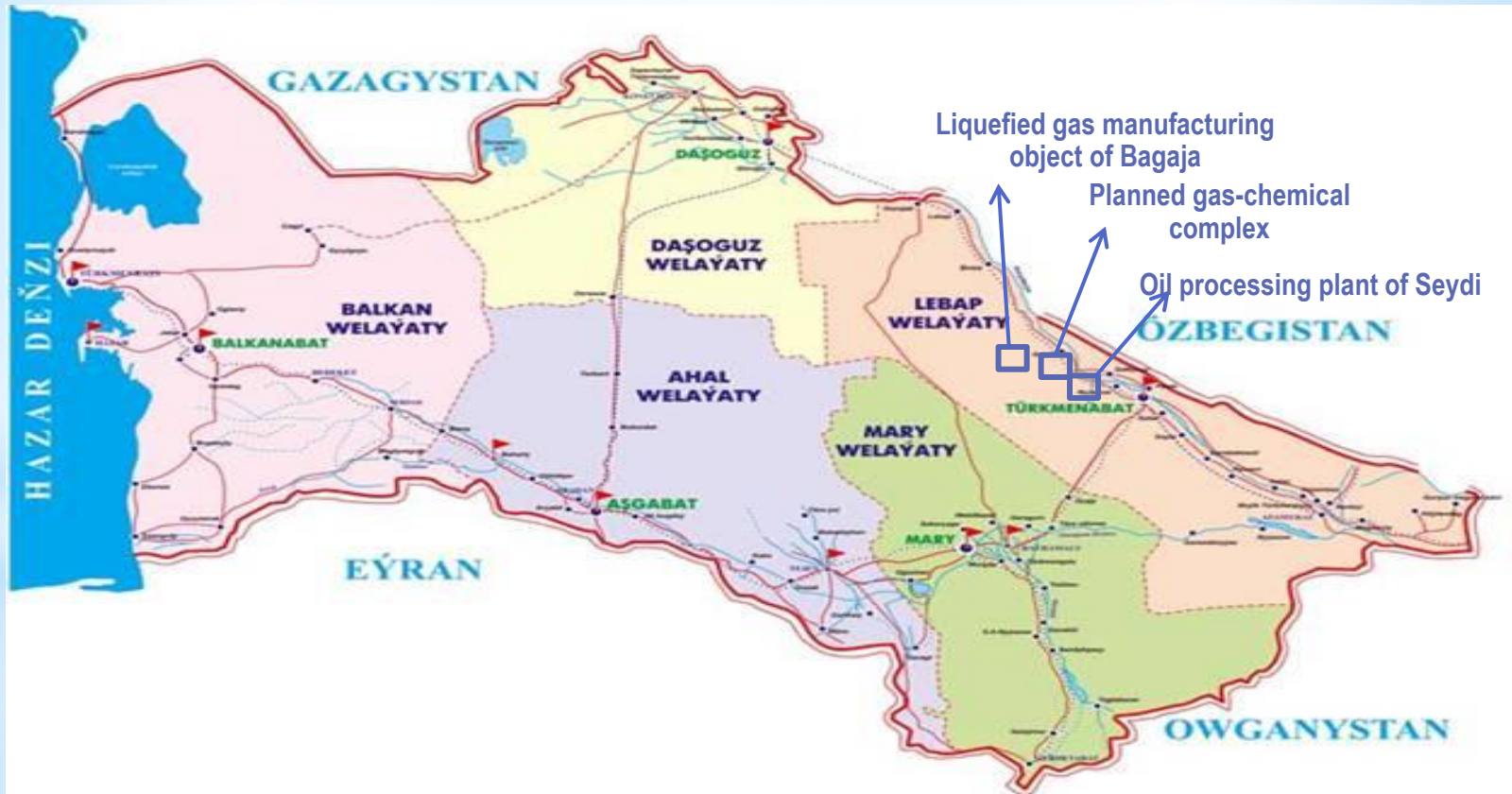


**Gas-chemical complex for butadiene-
styrene and polystyrene production**

Location of Butadiene-styrene and polystyrene manufacturing gas-chemical gas-chemical complex - Seydi city, Lebap region



Raw material supply of Butadiene-styrene and polystyrene manufacturing gas-chemical complex, Seydi city of Lebap region



- ✓ Ethane gas and benzene are the major raw materials of butadiene-styrene and polystyrene manufacturing gas-chemical complex
- ✓ 54 000 tons of ethane gas will be supplied by nearly situated Liquefied gas manufacturing object of Bagaja and 30 000 tons of benzene will be supplied by the Oil processing plant.

Product to be produced in butadiene-styrene and polystyrene manufacturing gas-chemical complex:



➔ Butadiene-styrene caoutchouc- 45 000 tons per year



➔ Polysterene - 25 000 tons per year



Butadiene-styrene product



Rubber products

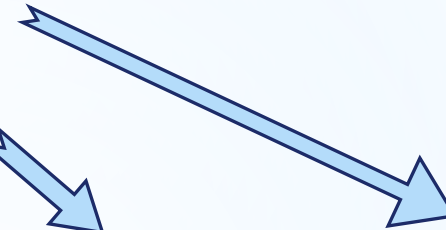


Wheels

Butadiene-styrene products are widely used in machinery and in other rubber industrial productions



Polystyrene products



Construction materials

Electrotechnical products Packages of foodstuffs

Polystyrene products are widely used in production of foodstuff packages, construction materials, agricultural goods and in other industrial uses.

Turkmenistan laws on foreign investment

- 1) Law on Foreign investment of Turkmenistan**
- 2) Law on Investment activity of Turkmenistan**
- 3) Law on Hydrocarbon resources of Turkmenistan**

Key points of the law:

- *According to new amendments to the law, downstream projects are also included as an object of the law;*
- *The term of the License is 20 years with the right to renew for another 10 years;*
- *The subcontractor is not required to obtain a License;*
- *The contractor has the right to freely dispose of his share of the products both in Turkmenistan and abroad;*
- *Goods, materials and equipment intended for work under the Project and imported by the Contractor to Turkmenistan, as well as products exported by the Contractor from Turkmenistan, belonging to him in accordance with the terms of the Project, are exempt from customs duties and fees established by the legislation of Turkmenistan;*
- *Taxation is carried out according to a simplified scheme;*
- *etc.*

The legislation on attracting foreign investment is in the process of constant improvement

Financing sources for project realization on construction of Gas-chemical complexes

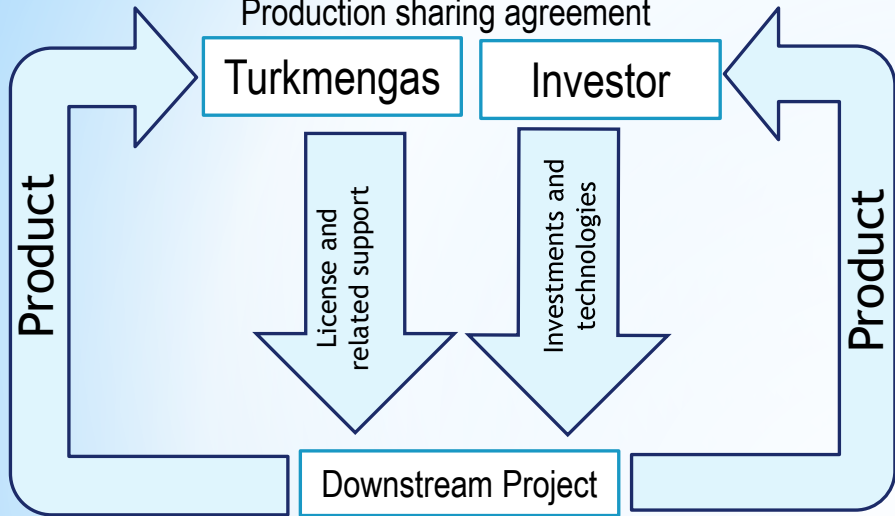
- 1) Investment funds
- 2) Return of funds due to the manufactured products
- 3) Credit funds and other sources

Areas of long-term partnership related to construction of Gas-chemical complexes

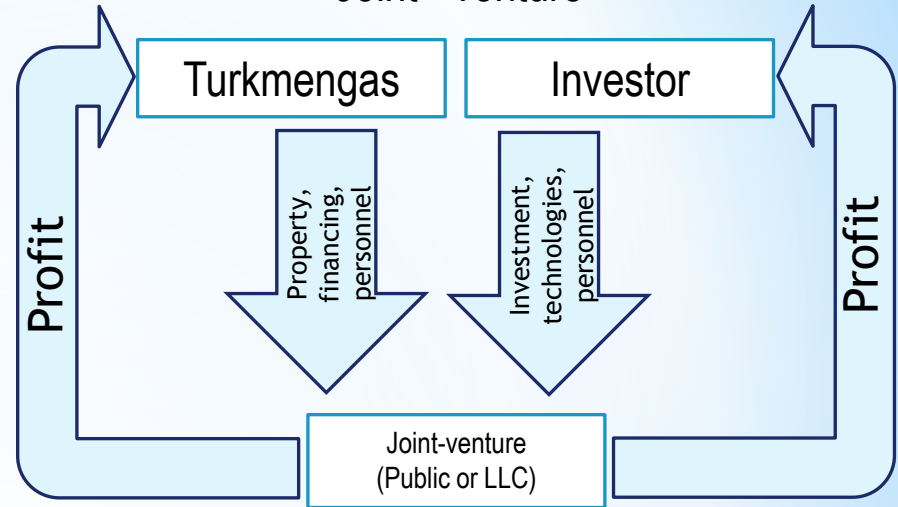
- 1) Joint employment of gas-chemical complex
- 2) Service performance by own power of Gas-chemical complex
- 3) Provision of material-technical, chemical and other auxiliary means

COOPERATION MODELS

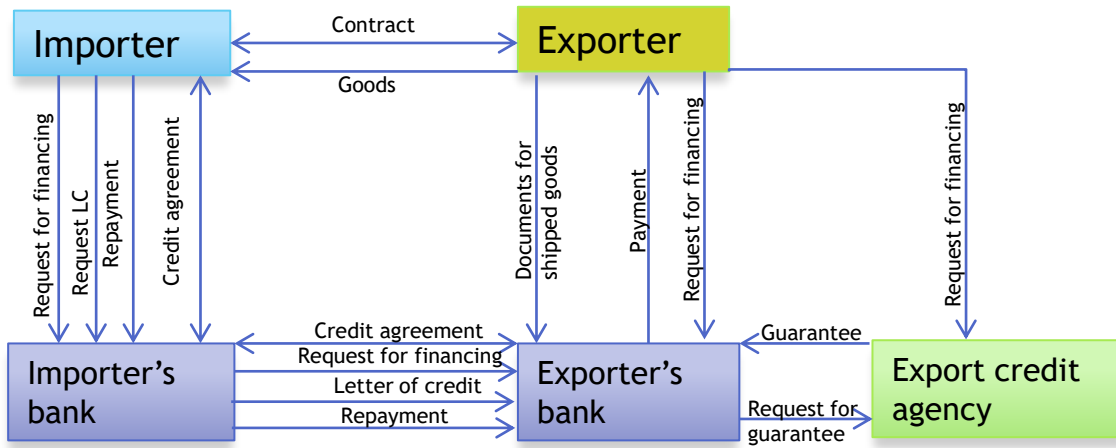
Direct investment on the basis of
Production sharing agreement



Joint - venture



Construction contract



**WE INVITE YOU TO
MUTUALLY BENEFICIAL
COOPERATION**

Thank you for your attention!



www.oilgas.gov.tm
turkmengaz@online.tm