

RECENT CMM PROJECT IN DONBASS AREA AND PLANS FOR ADAPTING EXPERIENCE IN KAZAKHSTAN

25th World Mining Congress

Company Information: UMG is an investment company, which is a part of the largest holding in Ukraine – System Capital Management (SCM)

UMG

UMG is a Ukraine-based investment company focused on the commodity sector. It was founded in 2006 by System Capital Management (SCM) as a commodity holding company. In 2016, it was transformed into an investment company with focus in mining, recycling, and commodities trading.

PARENT COMPANY – SCM

Ukraine's largest private diversified holding, managing over 100 companies

SCM business areas cover:

- ✓ metals and mining
- ✓ energy and fuels
- ✓ machine building
- ✓ agriculture
- ✓ finance
- ✓ telecommunications, media and other industries



2016 REVENUES

260 \$mIn

2016 EBITDA

86 \$mIn

ESTIMATED ASSETS UNDER
MANAGEMENT

400 \$mIn



2016 REVENUES

11.4 \$bIn

UMG Recycling Business: Recycling Of Industrial By-products Is Considered As Attractive Vector Of Development

UMG manages a portfolio of companies, which fall into the three main business areas:

- Mining: clay mining, limestone and dolomite extraction
- Recycling: fly-ash and slag materials, rare and technical gases
- Trading: agricultural products, logistics

The main UMG projects in Recycling:

- Coal mine methane
- Coke gas
- Fly Ash and granulated slag materials
- Ammonium sulfate

UMG is also actively pursuing new greenfield and M&A opportunities.

10 new projects under development on various stages of research and realization.



UMG Approach To CMM Projects: Focus Not Only on CHP construction, but on commercial success of the whole project

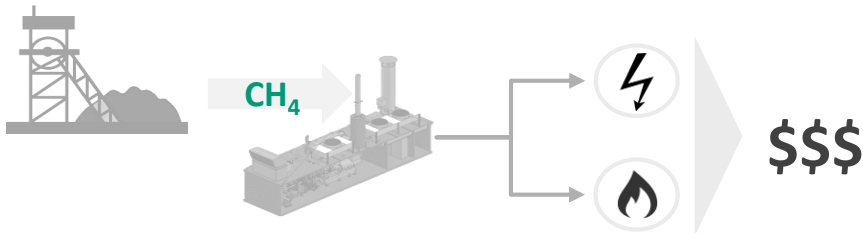
Our approach

UMG team has significant experience in complex approach development for CMM

Project strategy covers the following stages:

- Commercial assessment
- Project design
- Implementation of efficient degasation systems and modernizing existing ones
- CMM capturing and utilization
- Restructuring of degasation departments' management

UMG has sufficient resources and team with relevant experience for realization of the complex CMM projects



Key success factor

Ukrainian experience shows that several similar projects developed by other companies did not result in commercial success.

The main reasons were:

- Failure to assess correct CAPEX and OPEX of CMM projects
- Incorrect project designs
- Inefficient degasation systems, leading to instability in gas supply
- Project was aimed mainly to PR effect
- Project was targeted exclusively to provide compliance with Kyoto protocol

Our group company DTEK is the largest coal mining company in Ukraine, which incorporates World's best practices and advanced experience in practice of Former Soviet Republics and Eastern Europe

Completed Project: Sukhodolskaya-Vostochnaya

The mine is situated in Sukhodolsk, Lugansk region, Ukraine.

Part of PJSC «KrasnodonUgol» («Metinvest Group»)



The mine:

- Put into operation in December 1980
- Mining depth: 785—1028 meters
- Personnel: 3.5 thousand
- Annual production: 1.2 m. tons
- Type of coal: Coking

Sukhodolskaya-Vostochnaya mine is one of the most dangerous mines in the Donetsk Coal-basin due to high gas emissions.

One of the most gassy mines in Ukraine (>15 cubic meters of gas per 1 ton)

Project status: completed, suspended due to military situation in Donbass region

Project Details:

Capacity: 3.2 MW + 9.6 MW

Methane concentration: 25-35%

Project Under Development: Stepnaya

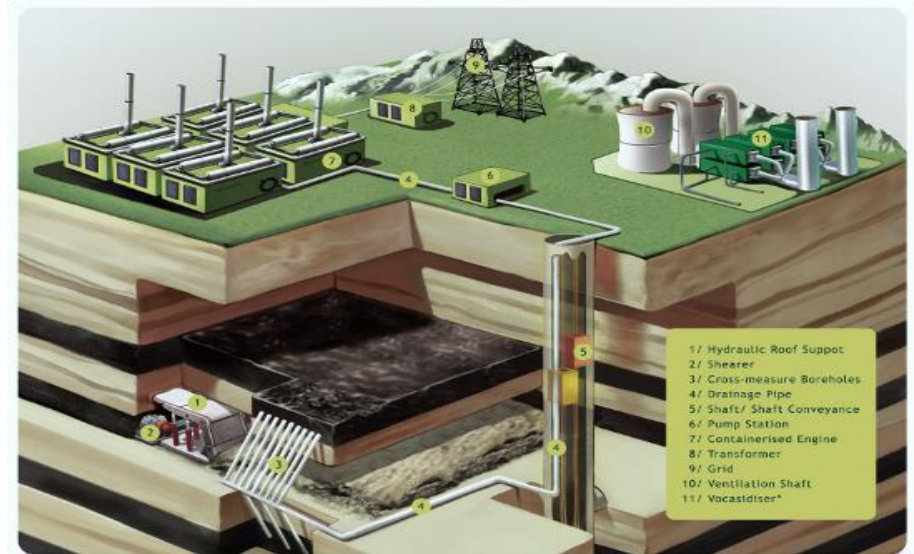
Stepnaya mine is situated in Pershotravensk, Dnipropetrovsk region, Ukraine.

Part of PJSC «DTEK Pavlogradugol»



Main characteristics:

- Put into operation in March 1965
- Current mine capacity: > 1.4 m. tons per year
- Personnel: 2.2 thousand
- Mark of coal: Gas type

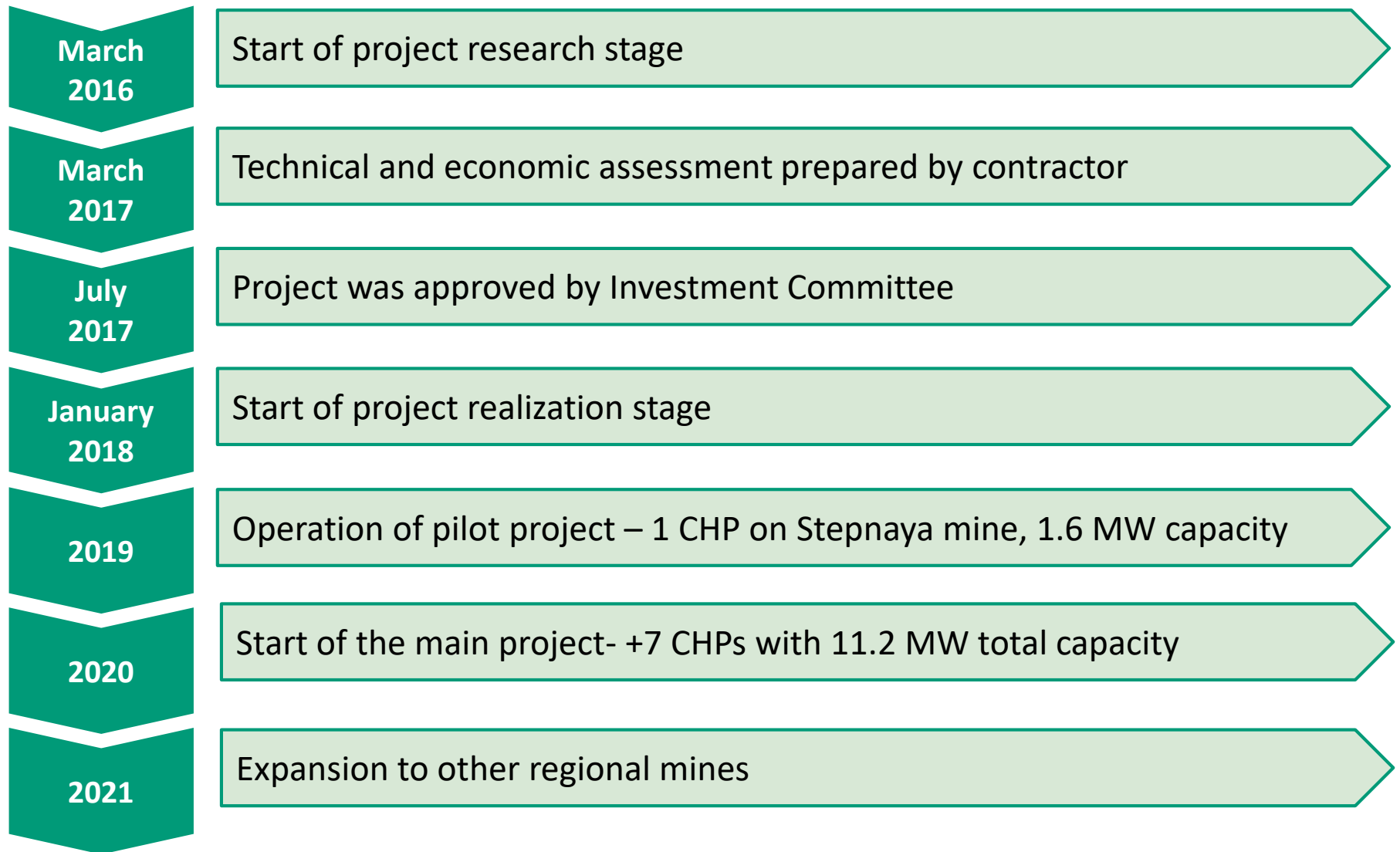


Project Details:

Capacity: 1.6 MW + 11.2 MW

Methane concentration: <30%

Stepnaya: Project Timeline and Expansion Plans



Plans Of Expansion To Kazakhstan: Karaganda and Ekibastuz Coal-Mining Fields

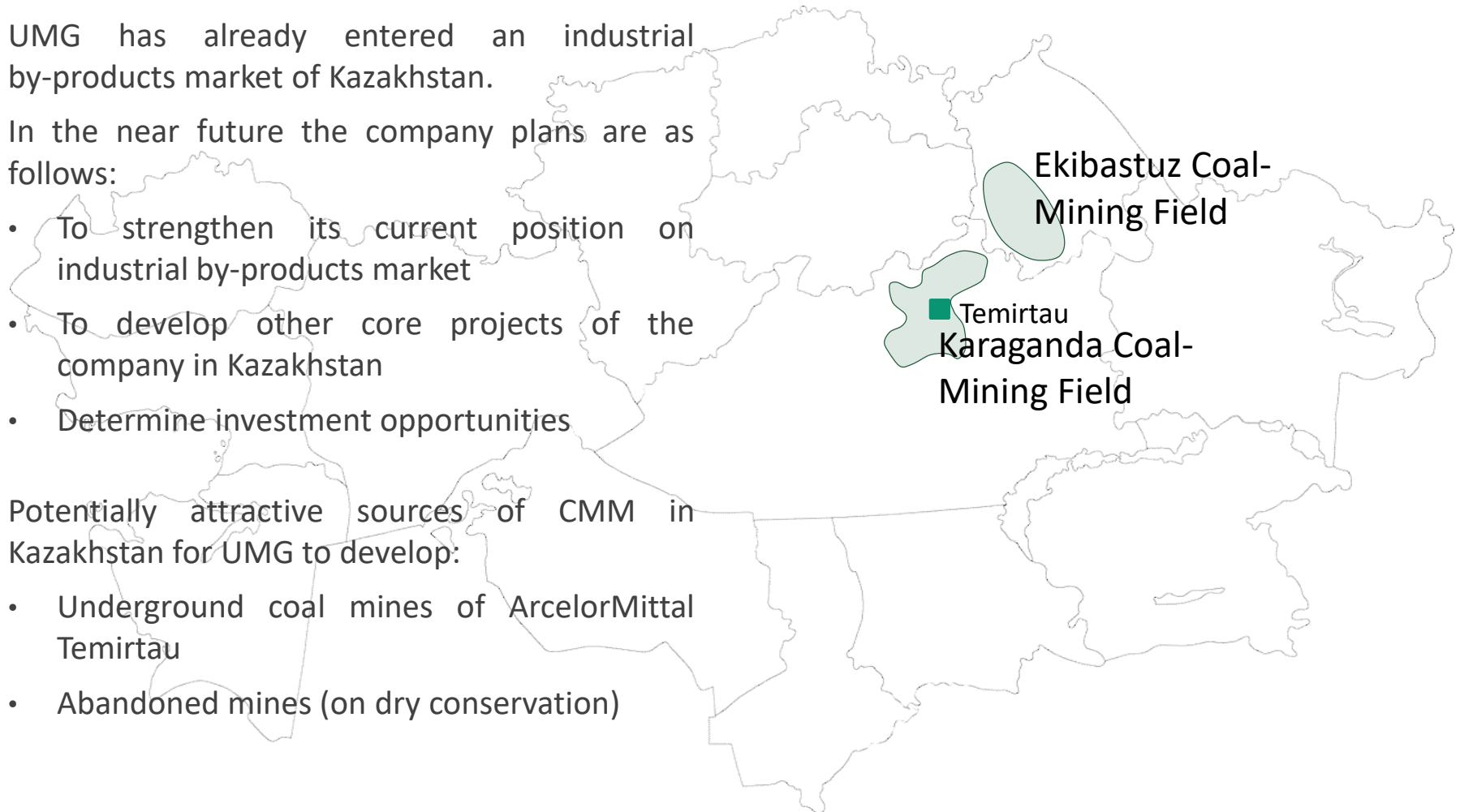
UMG has already entered an industrial by-products market of Kazakhstan.

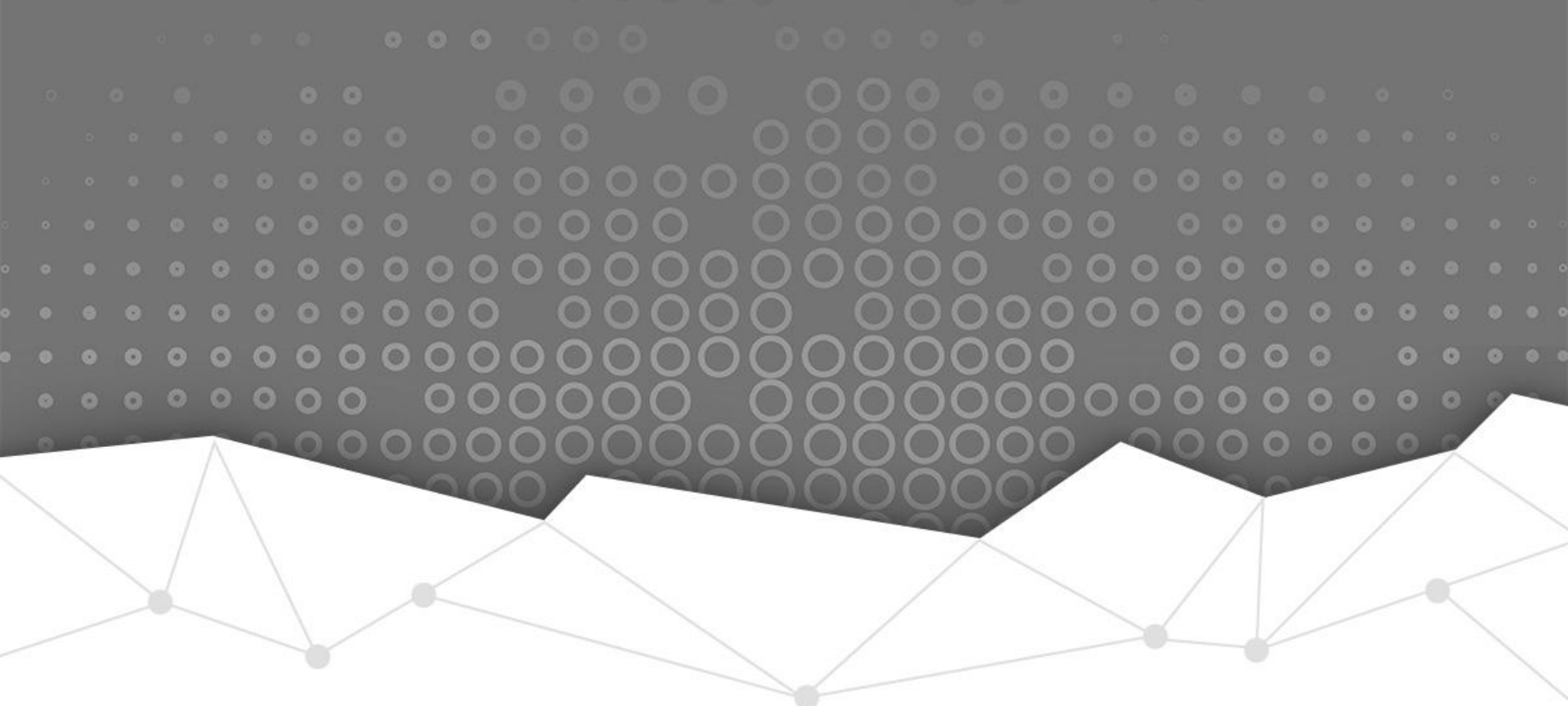
In the near future the company plans are as follows:

- To strengthen its current position on industrial by-products market
- To develop other core projects of the company in Kazakhstan
- Determine investment opportunities

Potentially attractive sources of CMM in Kazakhstan for UMG to develop:

- Underground coal mines of ArcelorMittal Temirtau
- Abandoned mines (on dry conservation)





THANK YOU FOR ATTENTION!