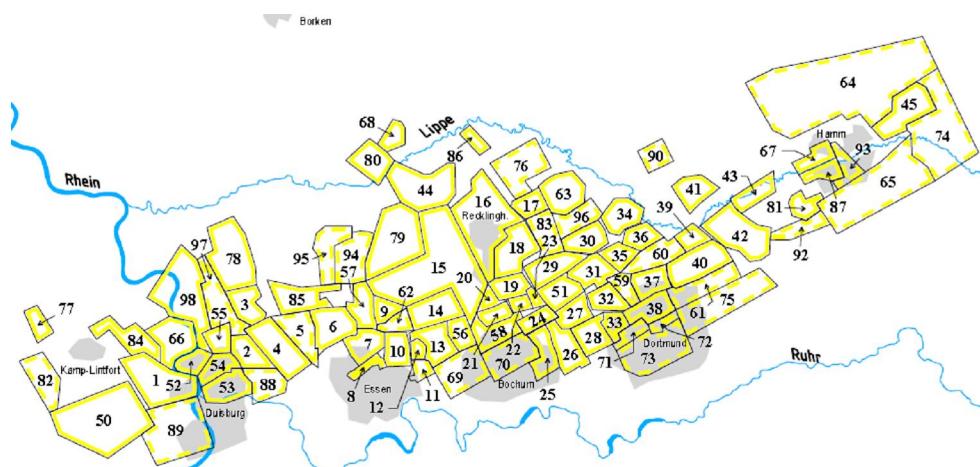


A-TEC is owner of 25 licensed claims for coal mine methane production in the Ruhr district in Germany
At five locations coal mine utilisation plants for power production are installed. Further plants are planned.

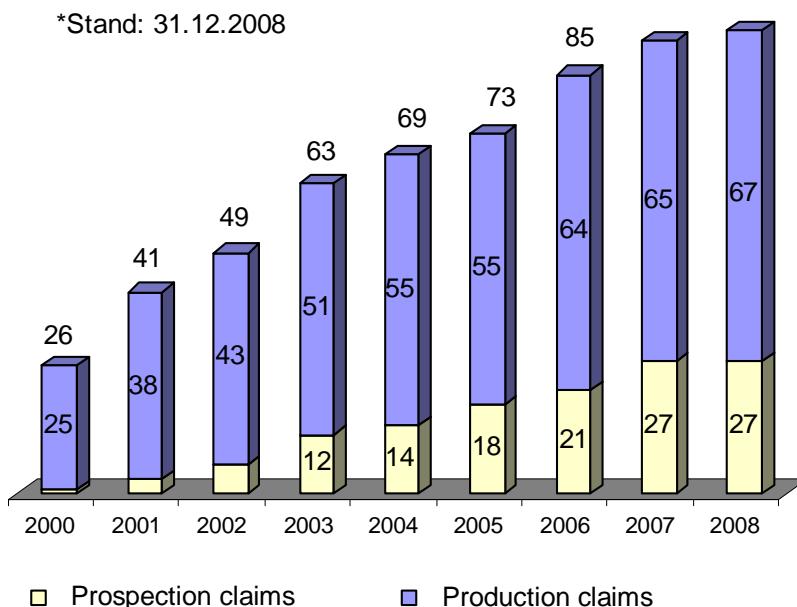
12 production wells have been drilled, at six wells CMM has been successfully found.

The other claims are monitored.

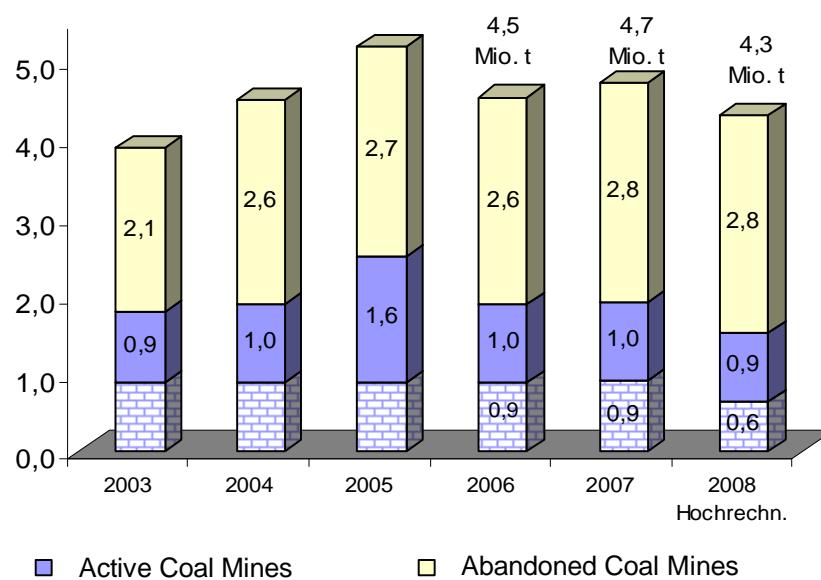


All claims of all companies in Ruhr District, Germany (2008)

Number of CMM claims in Ruhr District



Emissions reduction by CMM power generation, t CO₂eq Incl. Ibbenbüren Gas Turbine



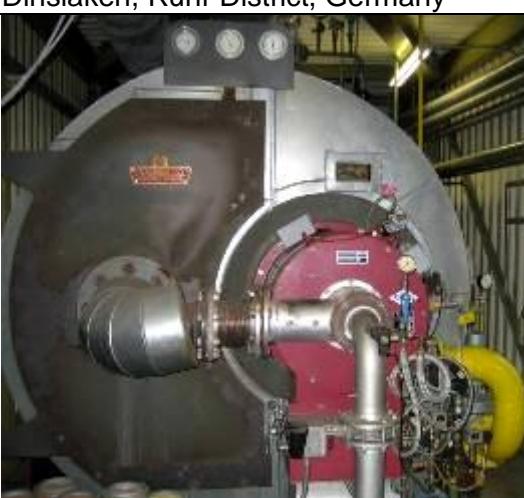
 Dortmund, Ruhr District, Germany	CMM utilisation plant %Wilberd I+ abandoned coal mine %Dorstfeld+ gas engine 500 kW _{el}
 Dortmund, Ruhr District, Germany	Drilling of a bore hole for CMM production %Wilberd II+
 Dortmund, Ruhr District, Germany	CMM test suction plant installed on a CMM bore hole, planned CMM utilisation plant %Wilberd III% gas suction 500-1,700 m ³ /h
 Alsdorf, Aachen Area, Germany	CMM utilisation plant %Mathanna+ abandoned coal mine %Anna+ two cogeneration units 2,700 kW _{el} heat utilisation for a coal mining museum

	<p>CMM utilisation plant %mudia TNT+ abandoned coal mine %Minister Achenbach+ three engines 4,050 kW_{el}</p>
	<p>CMM utilisation plant %üntec+ abandoned coal mine %Minister Achenbach+ 1,000 kW_{el}, heat utilisation for the %üntec-Technology Park+</p>
	<p>Drilling of a bore hole for CMM production planned Utilisation plant %abuela+ abandoned coal mine %onifacius+</p>
	<p>CMM utilisation plant sJarin%o abandoned coal mine sAlma%o 2,700 kW_{el}</p>

	<p>CMM utilisation plant %Rialisa+ Bore hole into the abandoned coal mine %Friedrich Thyssen+ two cogeneration units 2,700 kW_{el} heat utilisation for a public swimming pool</p>
<p>Duisburg, Ruhr District, Germany</p> 	<p>CMM utilisation plant %Sterkrade+ at the abandoned coal mine %Sterkrade+ two cogeneration units 2,700 kW_{el}</p>
<p>Oberhausen, Ruhr District Germany</p> 	<p>Drilling of a bore hole for CMM production planned Utilisation plant %Katrina+ abandoned coal mine %Emscher+</p>
<p>Essen, Ruhr District, Germany</p> 	<p>CMM test suction plant installed on a CMM bore hole, planned CMM utilisation plant %Reinphan% gas suction 0-500 m³/h</p>

	<p>CMM utilisation plant sCorvin I+ abandoned coal mine %oethringen+</p> <p>four cogeneration units 5,400 kW_{el} heat utilisation for the district heating system 5,600 kW_{th}</p>
	<p>CMM compressor station at the CMM utilisation plant %Corvin II%</p> <p>two vacuum pumps 500-1,700 m³/h each</p>

 <p>Herne, Ruhr District, Germany</p>	<p>Stadtwerke Herne AG CMM utilisation plant sHer-Mont%</p> <p>CMM compressor</p>
 <p>Herne, Ruhr District, Germany</p>	<p>Stadtwerke Herne AG sAm Trimbuschhof%</p> <p>drilling machine and CMM test suction plant installed</p>
 <p>Herne, Ruhr District, Germany</p>	<p>Stadtwerke Herne AG CMM utilisation plant sHer-Teuto</p> <p>air coolers</p>
 <p>Herne, Ruhr District, Germany</p>	<p>Stadtwerke Herne AG CMM utilisation plant sWan-Thal%</p>

	<p>Stadtwerke Herne AG CMM utilisation plant sHer-Fried%</p>
	<p>Coal mine sLohberg% two CMM fired boilers 2 x 10 MW heat production</p>
	<p>Stadtwerke Dinslaken containerised boiler 5 MW heat production</p>
	<p>CMM utilisation plant %Chertinskaya+ Noven OOO Coal Mine %Chertinskaya+ burning flare, 5 MW firing capacity</p>

	<p>5 MW flare installed at the Coal Mine sMolodogvardeyskaya%JSC Krasnodon Ugol</p>
<p>Krasnodon, Luhansk Oblast, Ukraine</p> 	<p>JI Project Shcheglovskaya . Glubokaya</p> <p>CMM burner system and monitoring system for</p> <p>3 upgraded boilers a 7.5 MW_{th} 1 ventilation air heater 3 MW_{th} 1 CHP 1.3 MW_{el}</p>
<p>Makiivka, Donetsk Oblast, Ukraine</p> 	<p>JI Project Coal Mine No. 22 Kommunarskaya</p> <p>Burning flare</p> <p>CMM burner system and monitoring system for</p> <p>5 upgraded boilers a 1 MW_{th} 1 ventilation air heater 3 flares a 10 MW_{th} 1 CHP 1.3 MW_{el}</p>
<p>Suyevka Donetsk Oblast, Ukraine</p> 	<p>JI Project Komsomolets Donbassa</p> <p>2 Flares a 5 MW_{th} 2 Boilers a 10 MW_{th}</p>

 <p>Krasnoarmeysk, Donetsk Oblast, Ukraine</p>	<p>JI Project Krasnoarmeyskaya-Zapadnaya No 1</p> <p>CMM burner system and monitoring for an upgraded boiler 25 MW_{th}</p>
 <p>Vugledar, Donetsk Oblast, Ukraine</p>	<p>JI Project Pivdennodonbaska No 3</p> <p>In planning</p> <p>1 Boiler 25 MW_{th} 1 Flare 10 MW_{th}</p>
 <p>Changzi, Shanxi-Province, China</p>	<p>LuQAn Mining Group</p> <p>Stakeholder meeting for a CDM-project</p> <p>CMM utilisation for power generation and heat supply</p>
 <p>Radlin, Upper Silesia Basin, Poland</p>	<p>Coal Mine %st of May+</p> <p>planning and conception of a CMM utilisation plant in Poland</p>

	<p>Mansfield Energy Park CMM utilisation plant two cogeneration units 2,700 kW_{el} gas supply for a textile factory Emissions trading</p>
	<p>CMM degasification plant Abayskaya, Accelor Mittal-Temirtau 2 x 180 m³/min CMM</p>
	<p>CMM degasification plant Kazakhstanskaya 1, Accelor Mittal-Temirtau 180 m³/min CMM</p>
	<p>CMM degasification plant Lenina 1+2+3, Accelor Mittal-Temirtau 3 x 180 m³/min CMM</p>

	<p>CMM degasification plant Saranskaya, Accelor Mittal-Temirtau 180 m³/min CMM</p>
	<p>CMM degasification plant Shakhtinskaya, Accelor Mittal-Temirtau 2 x 180 m³/min CMM</p>
	<p>CMM degasification plant Tentekskaya, Accelor Mittal-Temirtau 180 m³/min CMM</p>
	<p>JI Project SUEK-Kuzbass, Coal Mine Kirova CMM utilisation CHP 1.0 MW_{el} + Flare Unit 5 MW_{th} installed at a degassing well</p>

 <p>Leninsk-Kuznetsky, Kemerovo Oblast, Russia</p>	<p>CMM degasification plant 7 Noyabrya, SUEK-Kuzbass</p> <p>180 m³/min CMM</p>
 <p>Leninsk-Kuznetsky, Kemerovo Oblast, Russia</p>	<p>CMM degasification plant Kotinskaya, SUEK-Kuzbass</p> <p>180 m³/min</p>
 <p>Leninsk-Kuznetsky, Kemerovo Oblast, Russia</p>	<p>JI Project SUEK-Kuzbass</p> <p>CMM utilisation, two CHP units 1.558 MW_{el} at the coal mine Kirova</p>
 <p>Shernovo, Novokuznetsk District, Kemerovo Oblast, Russia</p>	<p>CBM Utilisation for power generation 1.35 MW_{el}</p> <p>Gazprom Dobycha</p>

	<p>Methane Utilisation Menteroda Compressor 200 m³/h CHP unit 0.365 MW_{el}</p>
<p>Menteroda, Thuringia, Germany</p> 	<p>CMM Flaring Krupinski, 1MW_{th}</p>
<p>Kiry, Upper Silesia Basin, Poland</p> 	<p>Lean gas utilisation, Coal Mine Kirova, SUEK-Kuzbass gas engine 400 kW_{el} and two flares 10 MW_{th}</p>
<p>Leninsk-Kuznetsky, Kemerovo Oblast, Russia</p> 	<p>CMM Utilisation Samsonovskaya-Zapadnaya, JSC Krasnodon Ugol Flare 15 MW_{th}</p>
<p>Molodogvardeysk, Luhansk Oblast, Ukraine</p>	