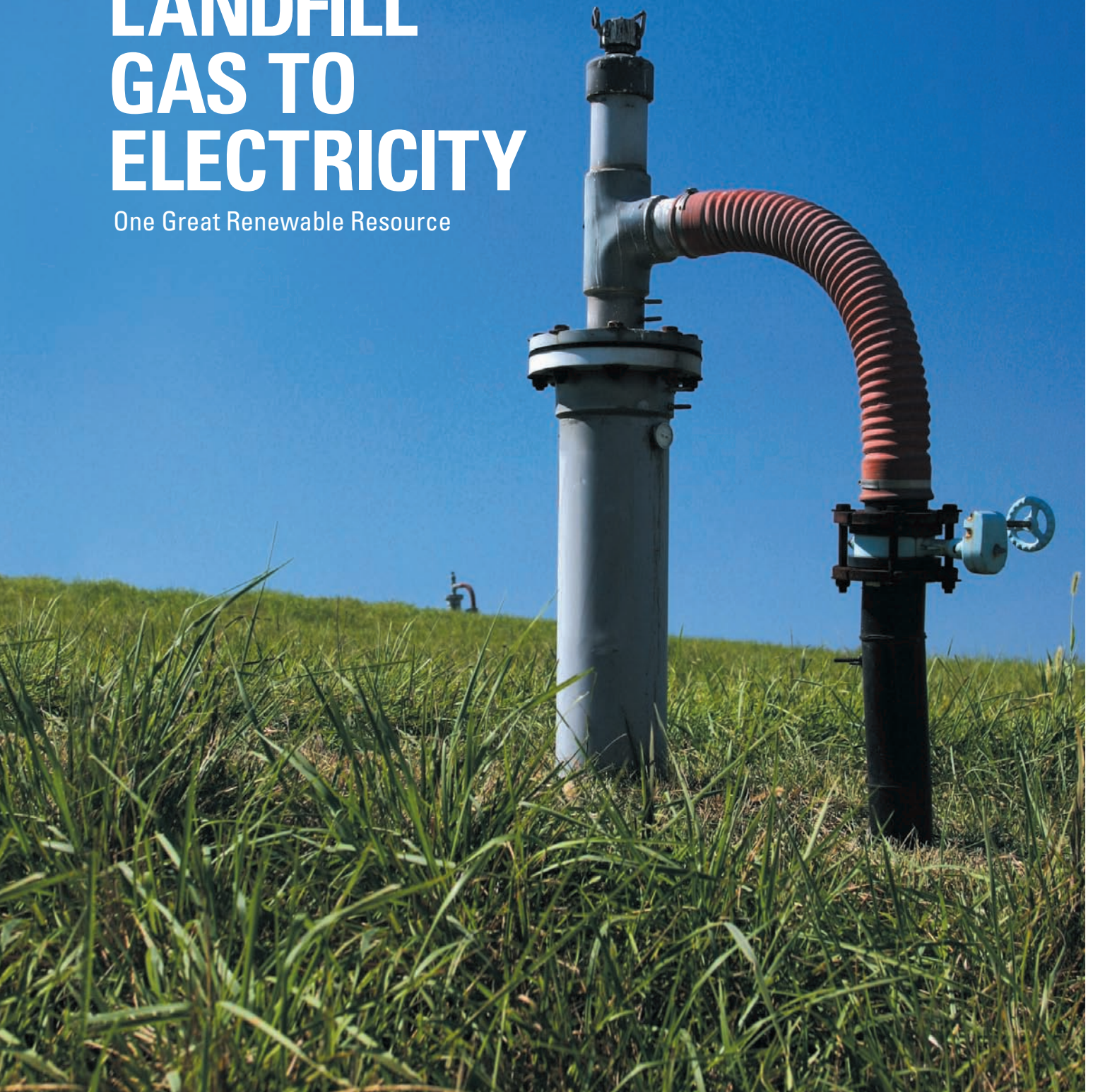


# LANDFILL GAS TO ELECTRICITY

One Great Renewable Resource



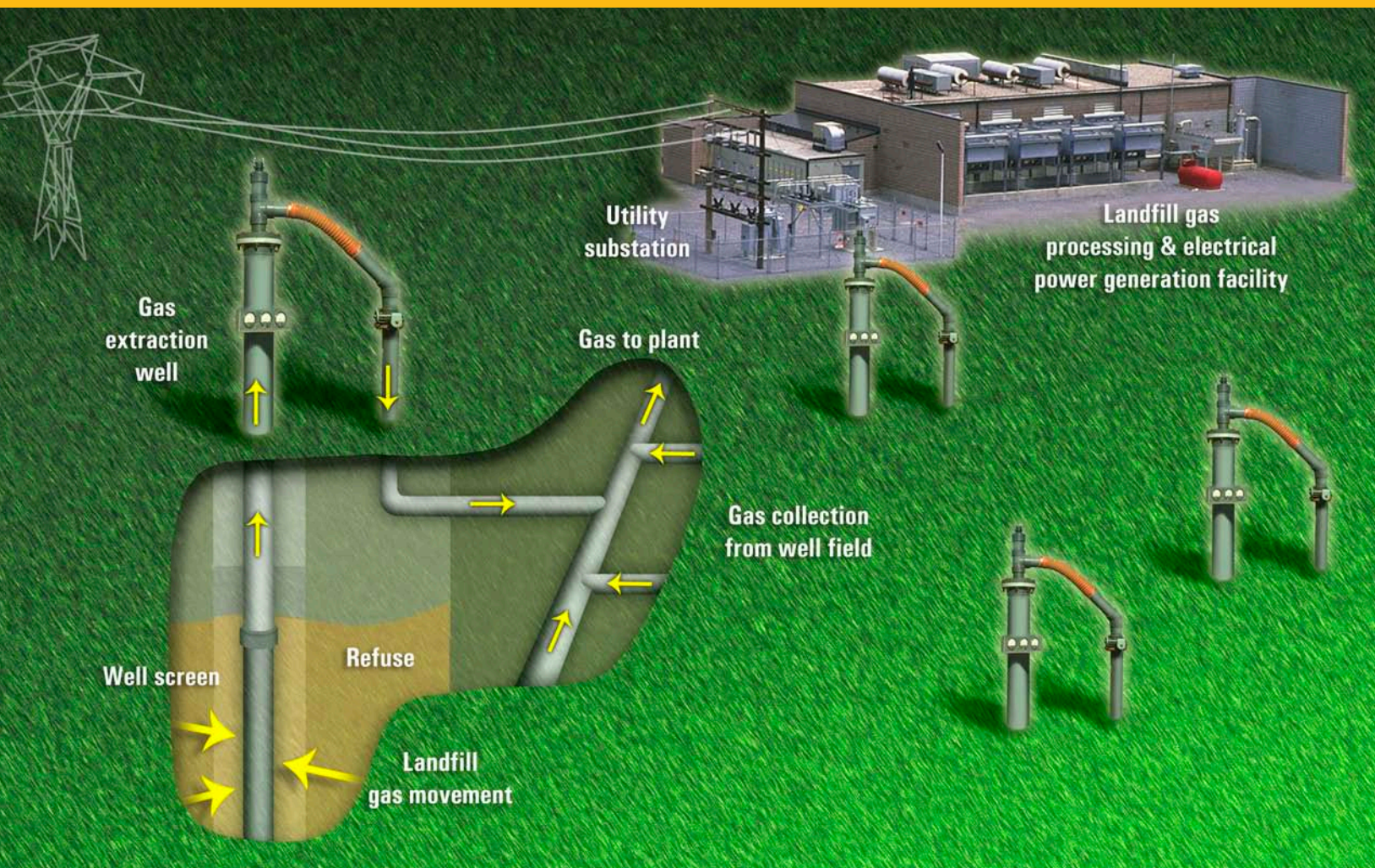


# TYPICAL LANDFILL DESIGN

To tap the power of landfill gas, there's one company to turn to: Caterpillar®.

Landfill methane is an abundant and readily available renewable energy source. It has the potential to fuel 2,700 MW of electric generating capacity in the United States alone and 9,000 MW worldwide.

To reduce greenhouse gases, governments around the world are encouraging projects that turn landfill gas to electricity. When you want to put landfill methane to work generating power, turn to Caterpillar.



## VANCOUVER ISLAND LANDFILL GAS POWER

Caterpillar constantly strives to develop the next generation of high-efficiency and low-emission gas engines operating on low-energy fuels. The utility is the first commercial 60 Hz G3520C generator set to convert landfill gas into energy. The 1.6 MW genset was sold to Maxim Power Corporation, who sells the generation to BC Hydro for its BC Green Power program. High power density and electrical efficiency, along with durable product and minimal cleanup expense, contributed to the economic success of the project.



## CATERPILLAR GIVES YOU TECHNOLOGY FOR THE TASK.

Cat® gas generator set products are the industry benchmark for reliability and performance. We offer:

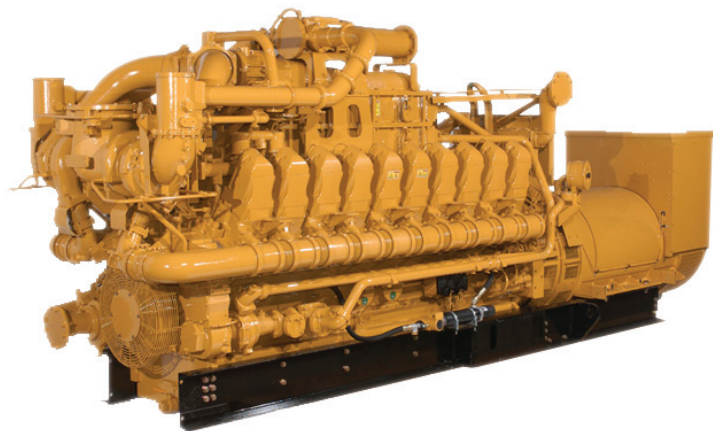
- The industry's broadest product line.
- Low-emission designs that meet most air-quality regulations.
- Flexibility to operate on a wide range of landfill gases.
- Long life with rugged internal components.
- Total system monitoring and management.

We've been in the landfill energy business for more than 20 years with reliable generator set products, sold and serviced by the world's best dealer network.

## DON'T FLARE IT. PRODUCE ENERGY.

Increasingly, state and local regulations require landfills to collect and destroy methane, a greenhouse gas that may also contain hazardous air pollutants. Flaring destroys the methane, but gas-fired power generation does so at a profit. Caterpillar engines burn landfill fuel cleanly to meet most strict air quality standards. Hundreds of Cat gen sets power landfill gas-to-energy systems worldwide, generating more than 5 billion kilowatt-hours of electricity each year.

More than half of all landfill engines worldwide bear the Cat brand. Run with Caterpillar and you'll produce low-cost power, every day, around the clock. With attractive installed cost and simple, affordable maintenance, you'll get fast payback on your generator set investment.



## YOUR PERFORMANCE EDGE.

For continuous landfill gas to electricity, Caterpillar provides one source for your complete project. Your local Cat dealer can design, install, service and maintain your generation equipment for the life of the project. We offer:

- Low installed cost
- Outstanding fuel efficiency
- Low electricity cost per kWh
- Worldwide 24/7 parts availability
- Maintenance and service contracts to fit your requirements

## WITH YOU FOR THE LONG RUN.

Your landfill energy project will last 20 years or more, and you need a reliable partner. Only Caterpillar has been around the industry from the start—and will be with you for the duration. Let us show you how to turn a "waste" gas into one of your greatest assets.



## SAO PAULO LANDFILL GAS POWER

The Aterro Bandeirantes landfill site near Sao Paulo, Brazil is one of the world's largest single landfill-gas-powered thermoelectric plants. It uses twenty-four 935 kW Cat generator sets to create 20 MW of generating capacity sold to the local utility, ANEEL. The facility can generate up to 170,000 MWh per year, enough power to meet energy needs of 400,000 people for 10 years.



## **ONLY ONE COMPANY OFFERS A COMPLETE ARRAY OF POWER SOLUTIONS.**

Now, more than ever, the world turns to Caterpillar for reliable power every second of every day.

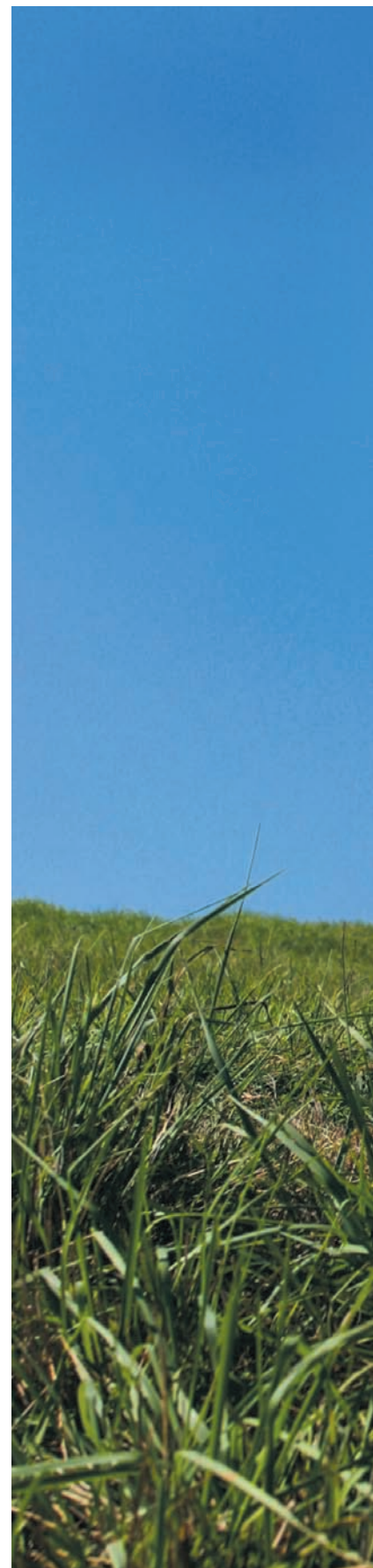
1,200 Cat dealer locations around the world are available to answer questions you may have about Cat power systems, customer support, and parts or service capabilities.

To find your nearest dealer go to: **[www.cat-electricpower.com](http://www.cat-electricpower.com)**.

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TODAY'S WORK. TOMORROW'S WORLD.™