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06 | 2016

UNITED NATIONS
Seminar on Ensuring
Access to Energy for all
Addis Ababa, Ethiopia



ECOMETANO : REBEWABLE FUEL UPSTREAM COMPANY IN BRAZIL



NATURAL GAS OF BRAZIL



BRAZIL: A NATURAL GAS CULTURE – 100 MILLION m3/day MARKET

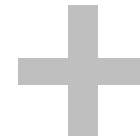


MARKET DRIVERS

**BIOGAS BEING
FLARED**

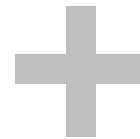
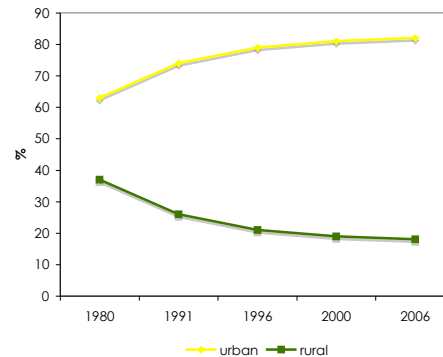
AVAILABILITY

**BRAZIL'S AGRI-
INDUSTRY IS WORLD
LEADER**



BIOMASS

**POSITIVE
POPULATION
GROWTH RATE**



BIOMASS

NEW NATURAL GAS
REGULATION
GUARANTEEING TRADING
MECHANISMS

MATURE
TECHNOLOGIES

MASSIVE GOVERNMENT
INVESTMENT IN
SUSTAINABLE
HOUSING AND GREEN
INFRASTRUCTURE



MOMENTUM

BEAUTIFUL LANDFILLS AND WWTP FOR APPROPRIATE DESTINATION OF MSW



BUT WE ALSO HAVE THIS ...



**35% OF MSW GOES TO
ILLEGAL DUMPS
45% of URBAN SEWAGE
IS NOT TREATED**

SAME APPLIES FOR AGRO INDUSTRIAL RESIDUES ... LARGE SCALE COMPOSTING FACILITY



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BUT THERE STILL ARE RIVERS DYING DUE TO ILLEGAL RESIDUAL DISPOSAL



**SOME CITIES CANNOT EXPAND THEIR SWINE POPULATION
UNLESS THEY CHANGE THE RESIDUE TREATMENT MODEL**

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BOTH IN AGRICULTURE AND URBAN POPULATION BRAZIL IS A WORLD POWER



O Brasil é o maior produtor mundial de cana-de-açúcar. Em 2012, produziu **594,3 milhões** de toneladas.



O país é o 2º maior produtor mundial de soja, perde apenas para os EUA. A produção de 2013/2014 foi de **86,27 milhões** de toneladas.



Também lidera o ranking das vendas externas do complexo de soja (grão, farelo e óleo), que é o principal gerador de divisas cambiais.

O Brasil é o primeiro produtor e exportador de:



CAFÉ



AÇUCAR



ETANOL



SUCO DE LARANJA

2015

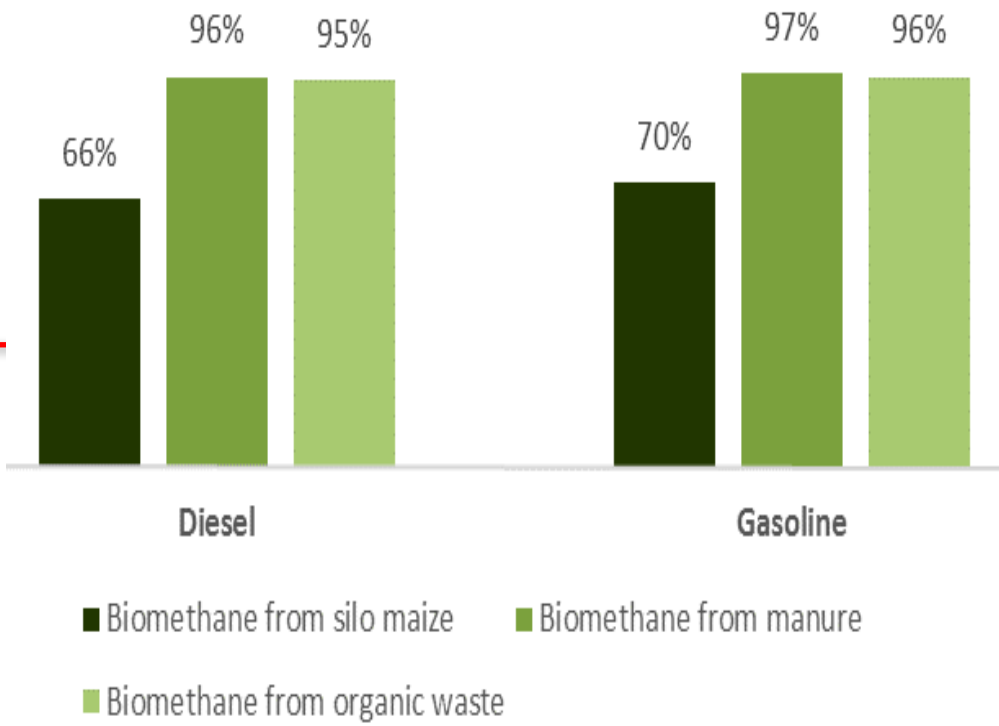
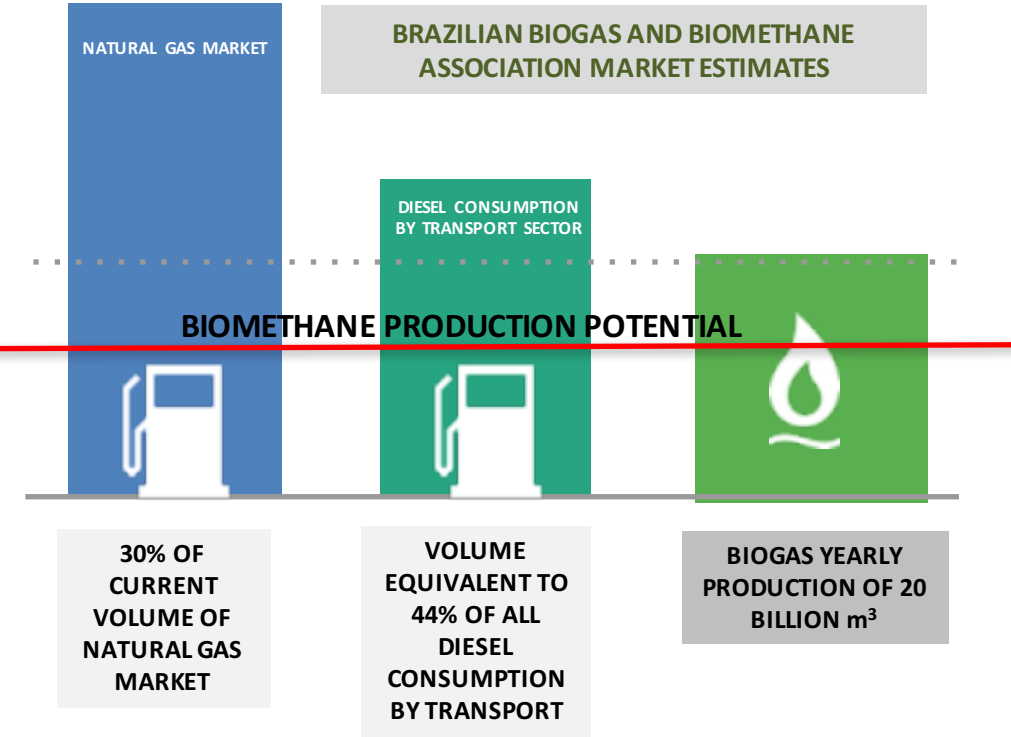
CHINA	1,372 MILLION
INDIA	1,314 MILLION
UNITED STATES	321 MILLION
INDONESIA	256 MILLION
BRAZIL	205 MILLION
PAKISTAN	199 MILLION
NIGERIA	182 MILLION

WORLDPOPDATA.ORG

BIOMETHANE MARKET POTENTIAL

BIOMETHANE POTENTIAL CAN SUBSTITUTE 30% OF NATURAL GAS OR 44% OF DIESEL MARKETS

WELL TO WHEEL GHG EMISSIONS REDUCTION POTENTIAL





REVISTA ECONOMIA RIO
AGOSTO 2015

Uma referência na produção de biogás

A Usina Dois Arcos, da EcoMetano, que produz biogás purificado (biometano) a partir de resíduos sólidos urbanos de oito municípios da Região dos Lagos, foi apresentada como estudo de caso no International Conference on Renewable Energy Gas Technology (Regatec) 2015. O evento reuniu em Barcelona, na Espanha, especialistas e empreendedores na produção de biometano por meio de conversão microbiológica e termoquímica de biomassa e resíduos de todo o mundo.

O investimento na usina foi de R\$ 20 milhões, incluindo a instalação do aterro sanitário. A estimativa de produção é de cerca de 8 mil m³ de biometano/dia, chegando a 15 mil m³/dia em 2020. O aterro recebe aproximadamente 700 toneladas/dia de resíduos sólidos urbanos. No início, o biometano será fornecido em cilindros, como gás natural comprimido (GNC), para clientes industriais. Futuramente, a usina poderá ser ligada à rede de distribuição da CEG e da CEG Rio, concessionárias de gás canalizado do Estado.

DOIS ARCOS LANDFILL



COMPLETE VIEW

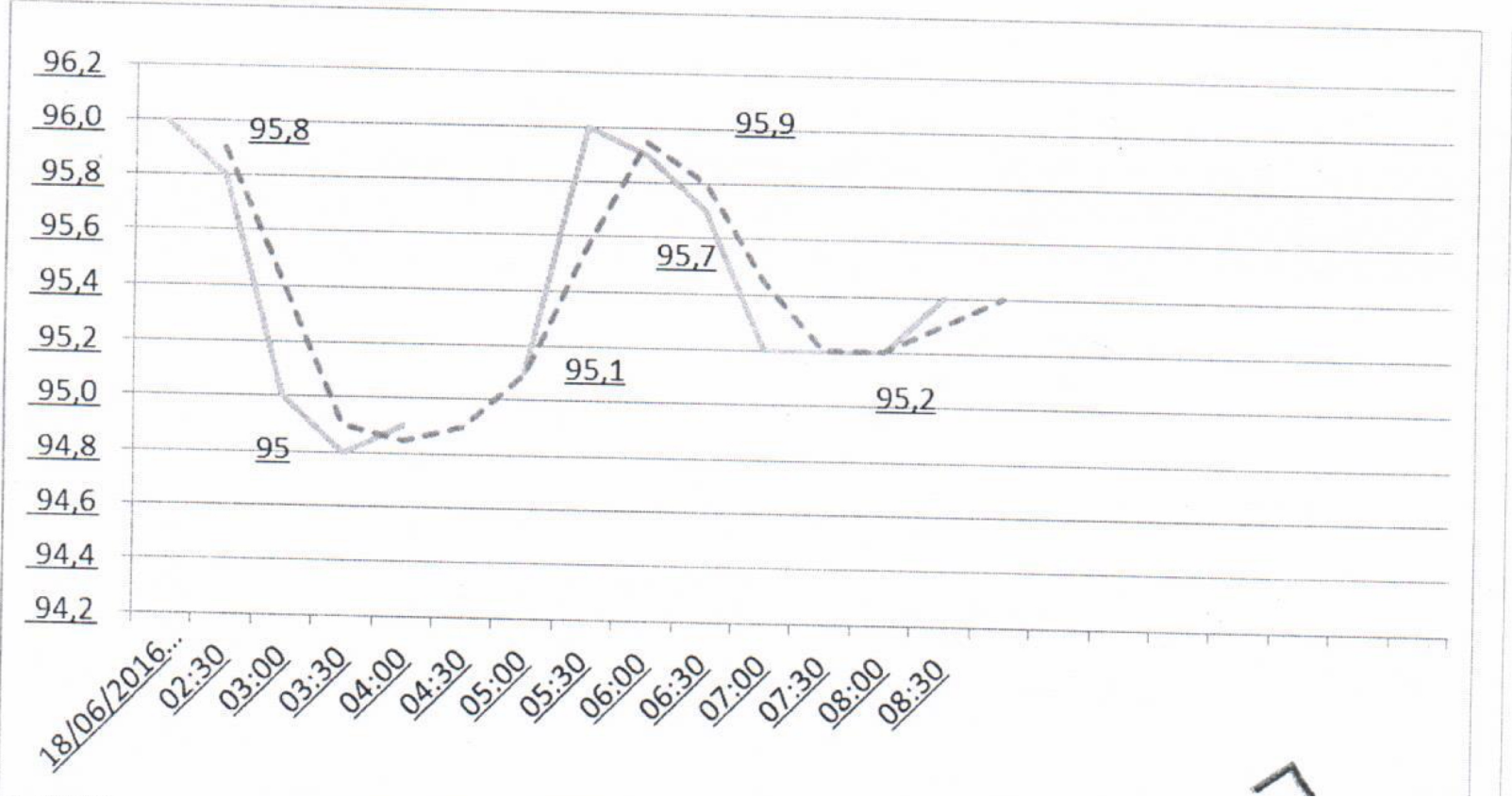


DOIS ARCOS BIOGAS UPGRADING FACILITY



HIGH QUALITY BIOMETHANE

TEMPO DE CARREGAMENTO: INÍCIO: 18/06/2016 – 02:00 HORAS
FIM: 18/06/2016 – 08:30 HORAS



CAPACITY TO FUEL CNG TRUCKS AND PIPELINE INJECTION



URBAN BUSES ON BIOMETHANE



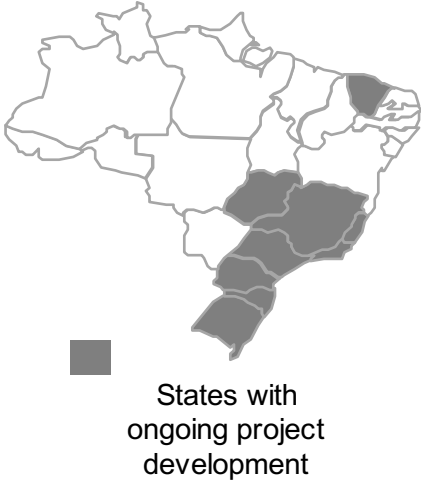
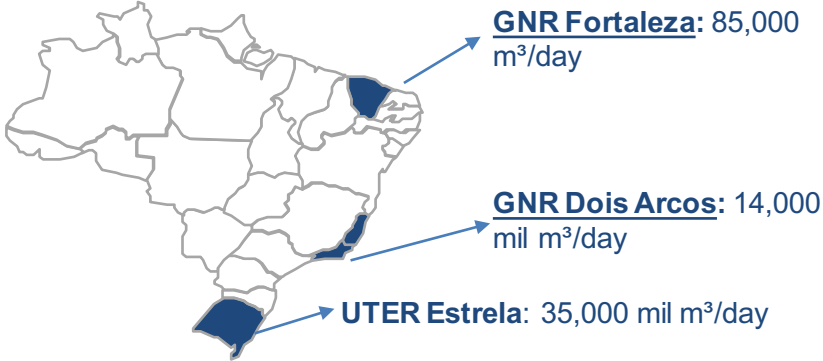
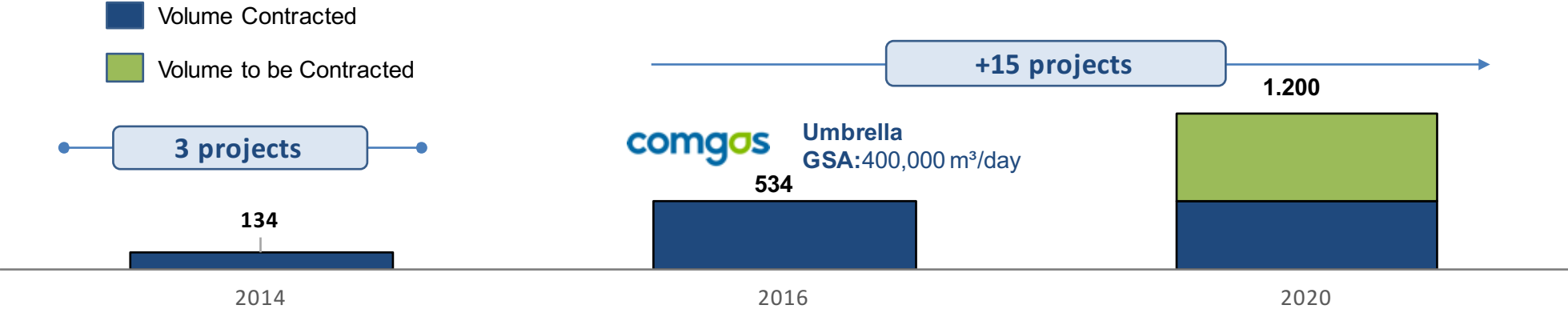
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WASTE COLLECTION FLEET POWERED BY BIOMETHANE



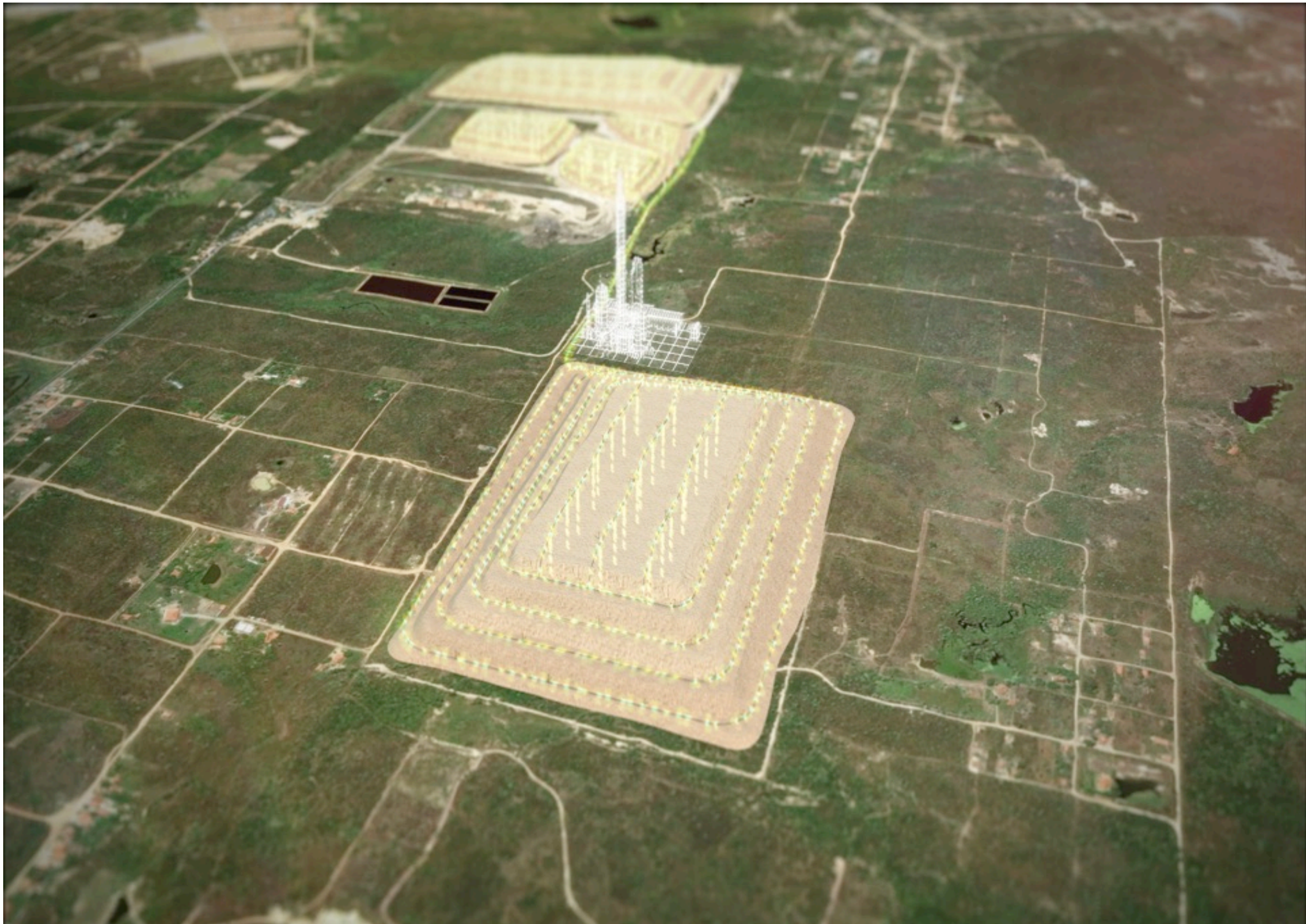
COMPANY GROWTH PLAN

Contracted Biomethane Volume Projection (in '000 m³/day)

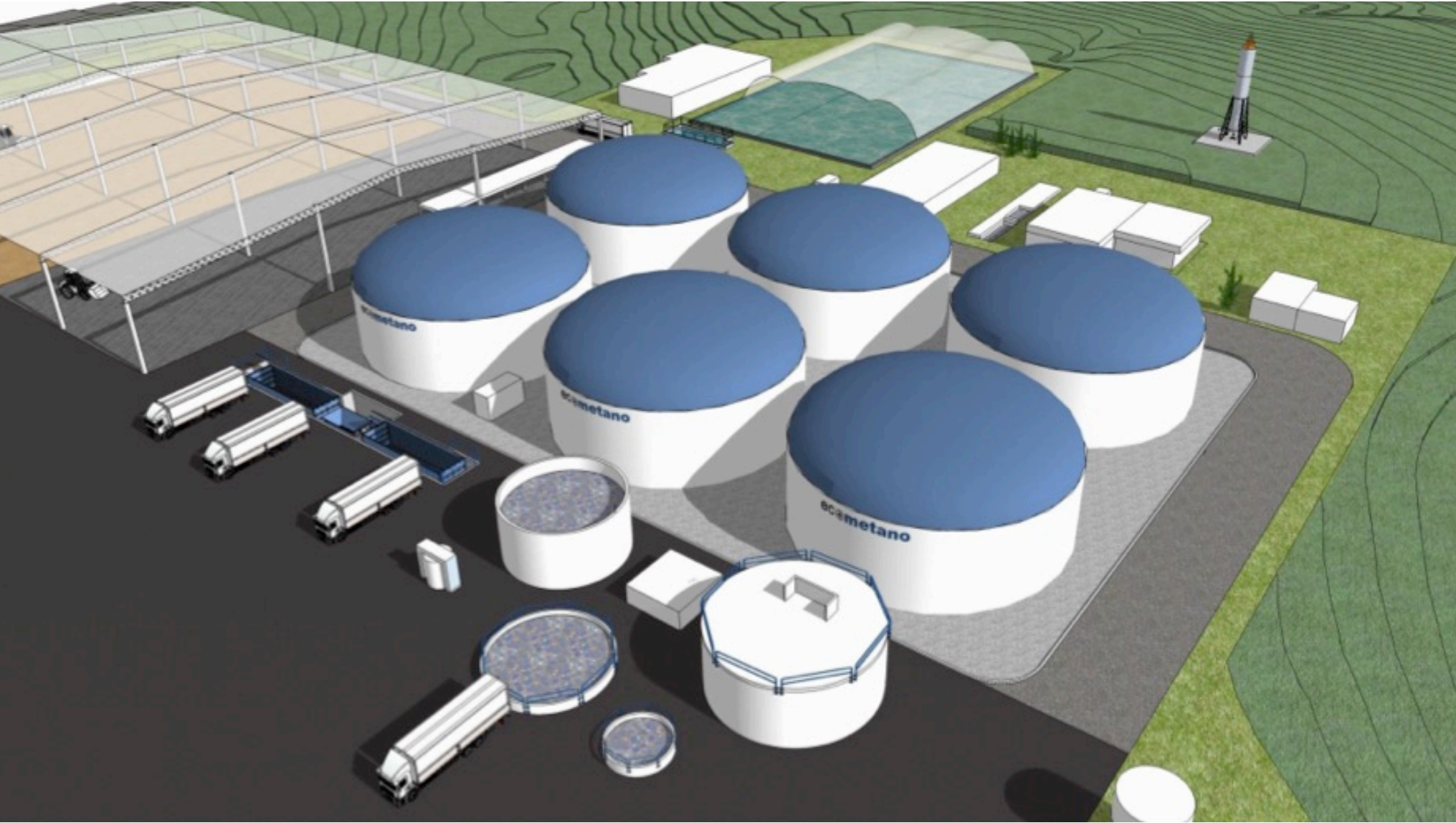


LARGE SCALE LFG-TO-PIPELINE UNIT: OPERATION BEGINS 06/2017

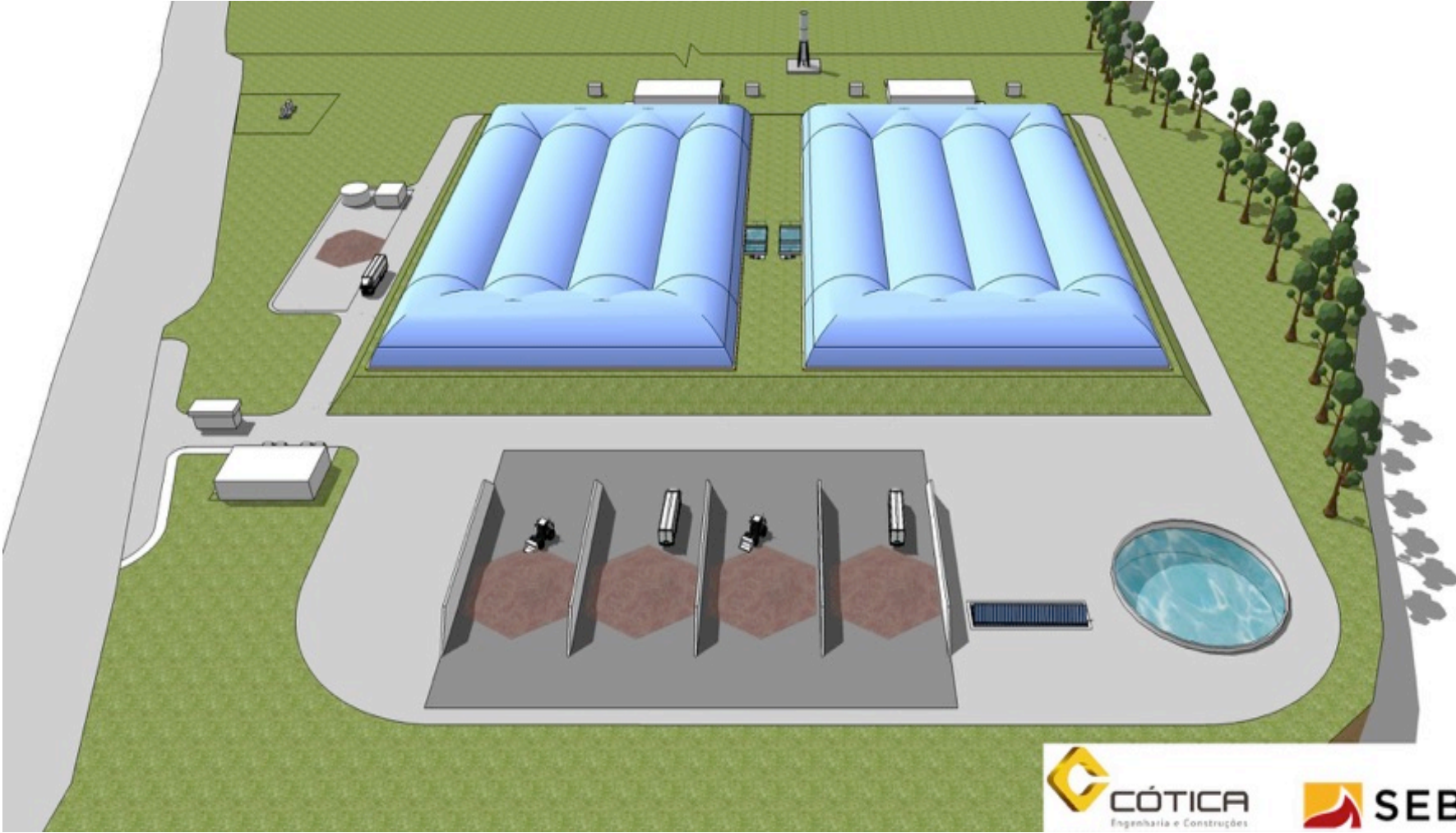




LARGE SCALE BIOMASS-TO-PIPELINE UNIT: CONSTRUCTION BEGINS 12/2016



LARGE SCALE VINASSE-TO-PIPELINE UNIT: CONSTRUCTION BEGINS 2017



ECOMETANO'S VALUE PROPOSITION

- Capital Intensive **Feedstock to Customer** Business Model;
- **Certified Emissions Reductions** (CDM) portfolio;
- Replacement of Fossil Fuels generates **positive environmental impact**;
- Improvement of residue treatment methods increases **social returns**;
- Increase in local RNG production **decreases LNG imports** and weighs positively on commercial balance;
- Heavyweight work for **positive regulation** creates ground for long term competitiveness



MARCIO SCHITTINI
marcio.schittini@ecometano.com.br
+ 55.21.3177.5900

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