



Rio
PREFEITURA

COMLURB



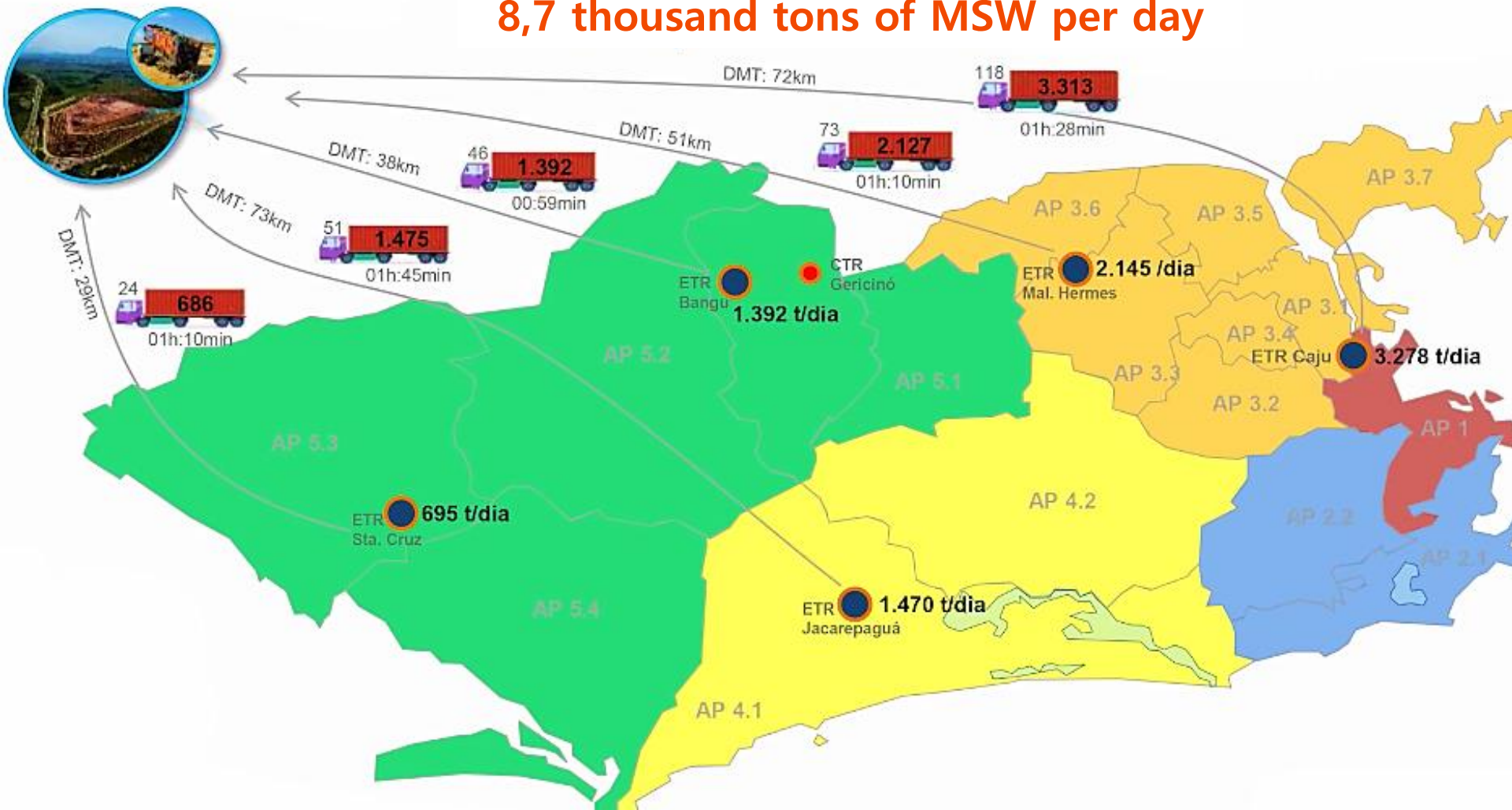
**CAJU's ECOPARK:
Circular Economy of Organic Waste**

CAJU's ECOPARK: Waste Transfer Station and Circular Economy of Organic Waste



Rio de Janeiro City

8,7 thousand tons of MSW per day



- Total Area: 1,200 km²
- Population: 6,211,223
- Population Density: 5,174
- IDH: 0,799
- PIB per capita: R\$53.078
- Waste per capita: 506 kg



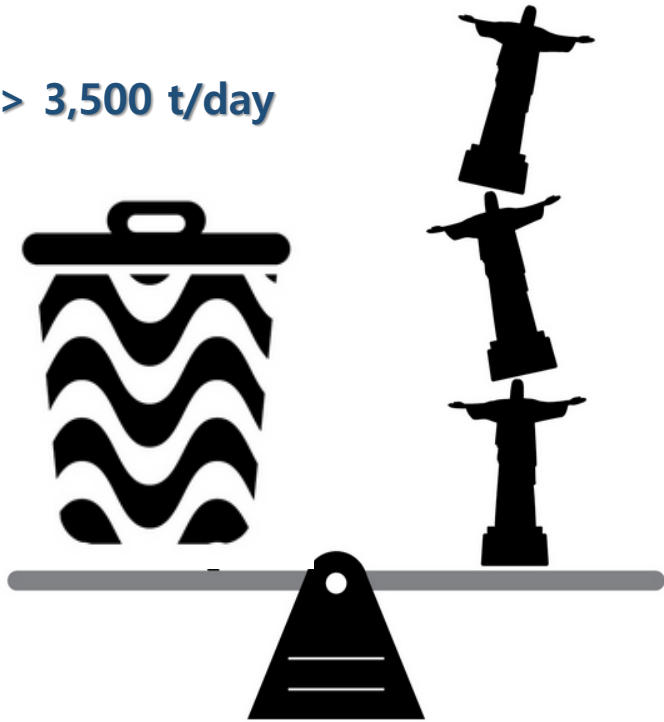
CTR-Rio Landfill: Biogas to Electricity and Biomethane

- ✓ **Waste Capacity:** 10,000 t/day
- ✓ **Biogas Flow:** > 20,000 Nm³/h
- ✓ **Power Capacity:** 7,8 MW
- ✓ **Biomethane Production:** 130.000 Nm³/day



Caju's Ecopark: Valorization of Organic Waste and Energy Transition

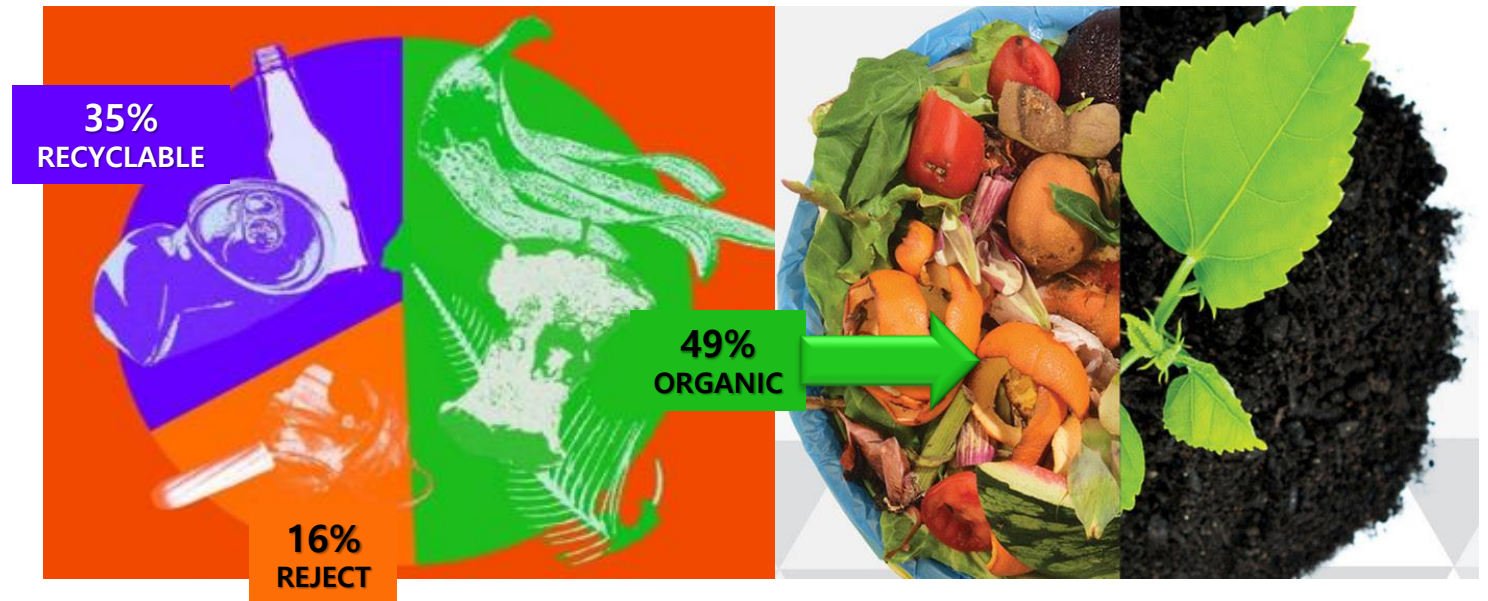
> 3,500 t/day



The Largest Waste Transfer Station
in Rio de Janeiro

75 km far from landfill

Half the Problem or Half the Solution?



Caju's Ecopark: Biological Treatment and Circular Economy of Organic Waste

Pruning Processing Unit



Composting and Production of Organic Compost

Anaerobic Digestion and Energy Use of Biogas





Pruning Mechanical Processing

Shredding and Sieving



450 t/mês



Bio-Solid Recovered Fuels (BioSRF)

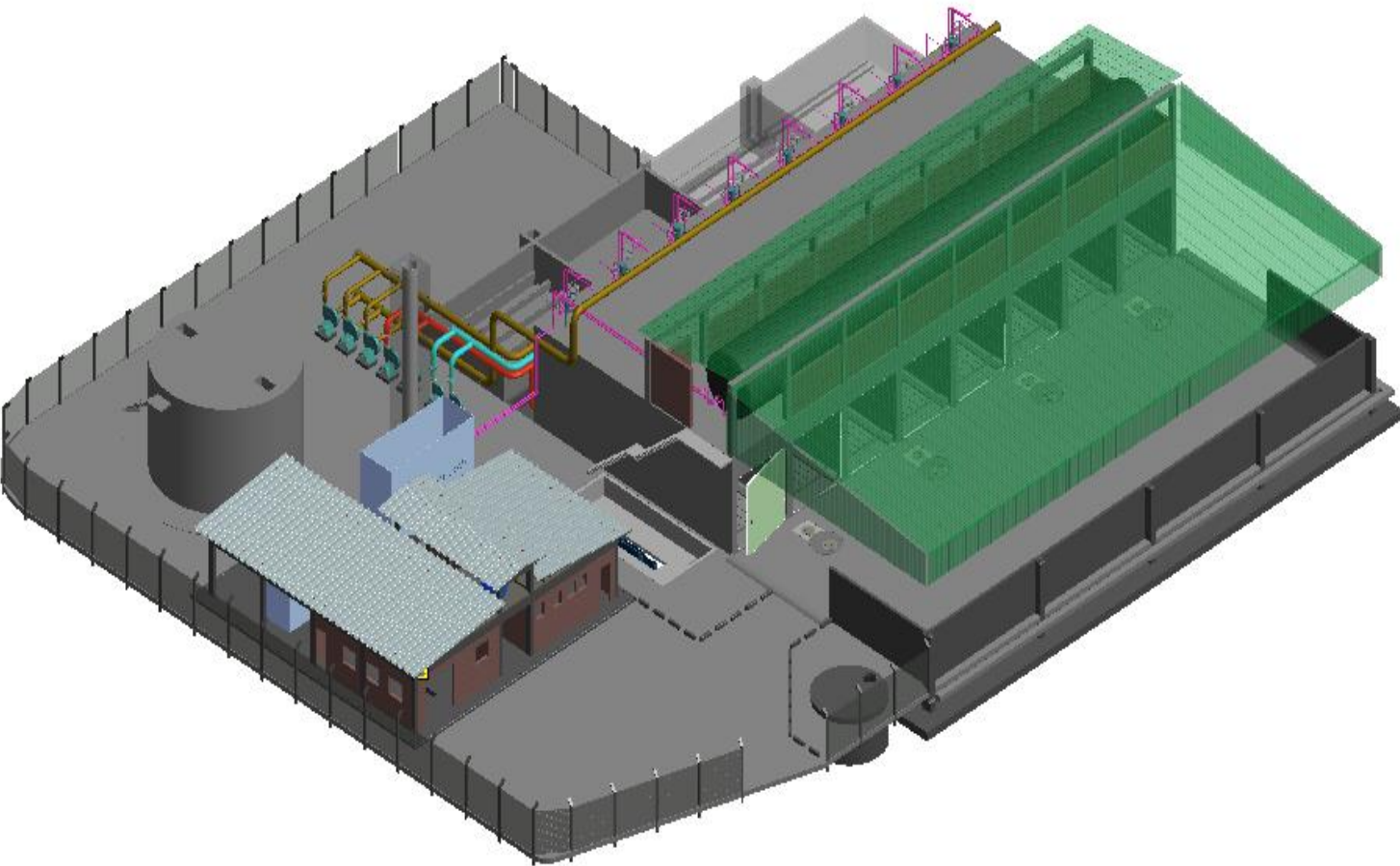


Carbon Source for Biological Treatment



Biomethanization Pilot Unit

Organic Waste Treatment and Biogas Production



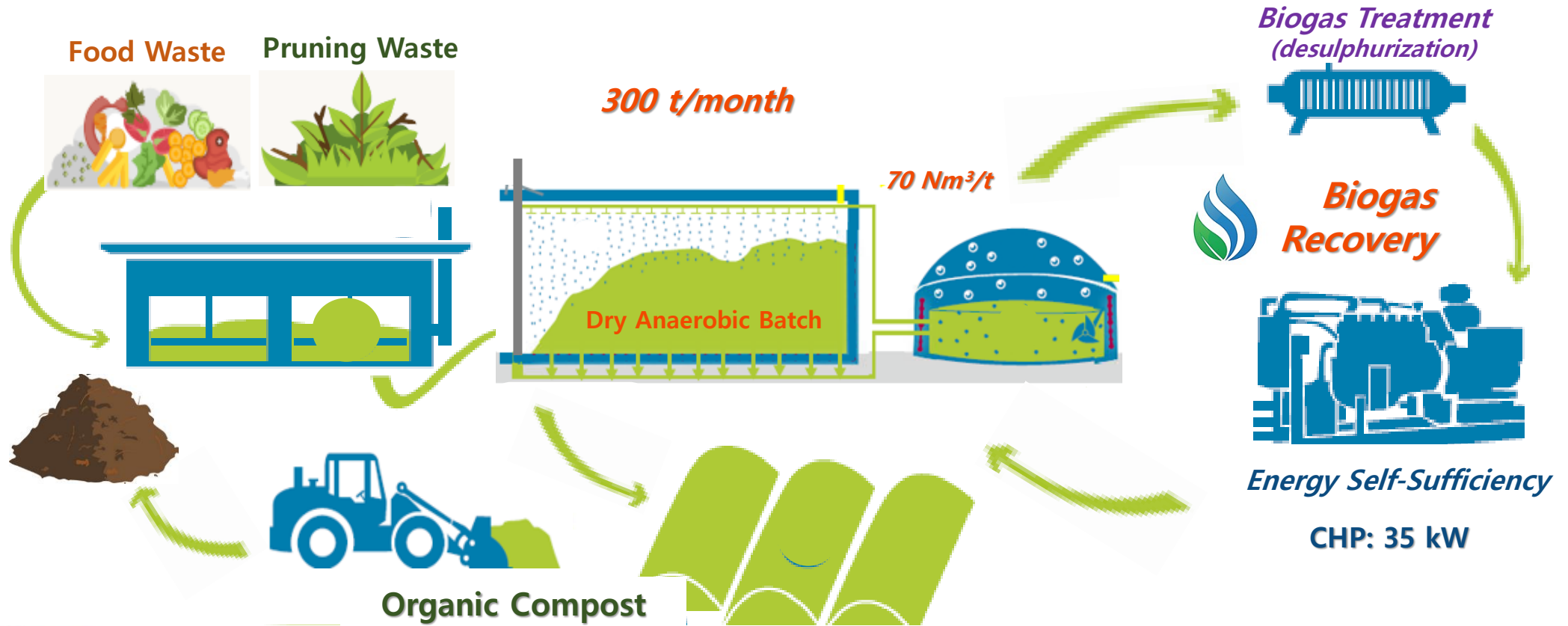
Technical Cooperation Project

(Private Initiative + Public Administration + University)

- ✓ **Start-up:** 2019
- ✓ **Investment:** R\$ 11 millions (BNDES)
- ✓ **Built Area:** 1,000 m²
- ✓ **Treatment Capacity:** 3,500 t/year
- ✓ **Equivalent Population:** 15 thousand inhab.
- ✓ **Electric Power:** 35 kW
- ✓ **Compost Production:** 400 t/year

Biomethanization Pilot Unit

Organic Waste Treatment and Biogas Production





Biomethanization Pilot Unit

Energy Transition and Decarbonization of the Economy

Biogas Storage



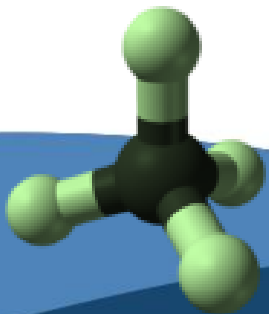
Desulfurization Filter



Biogas Electrical Use



> 50% CH₄



35 kW Electric Energy Self-Sufficiency



Soil Regeneration | "Carbon Sequestration" Urban Agriculture | Food Security



Mechanical Sieving Equipment for Compost Processing - Fertilurb



HORTAS CARIOCAS

não é só sobre cultivo

**SOURCE FOOD GROWN
REGENERATIVELY,
AND LOCALLY WHERE
APPROPRIATE**

**DESIGN AND
MARKET
HEALTHIER
FOOD PRODUCTS**



Obrigado!

