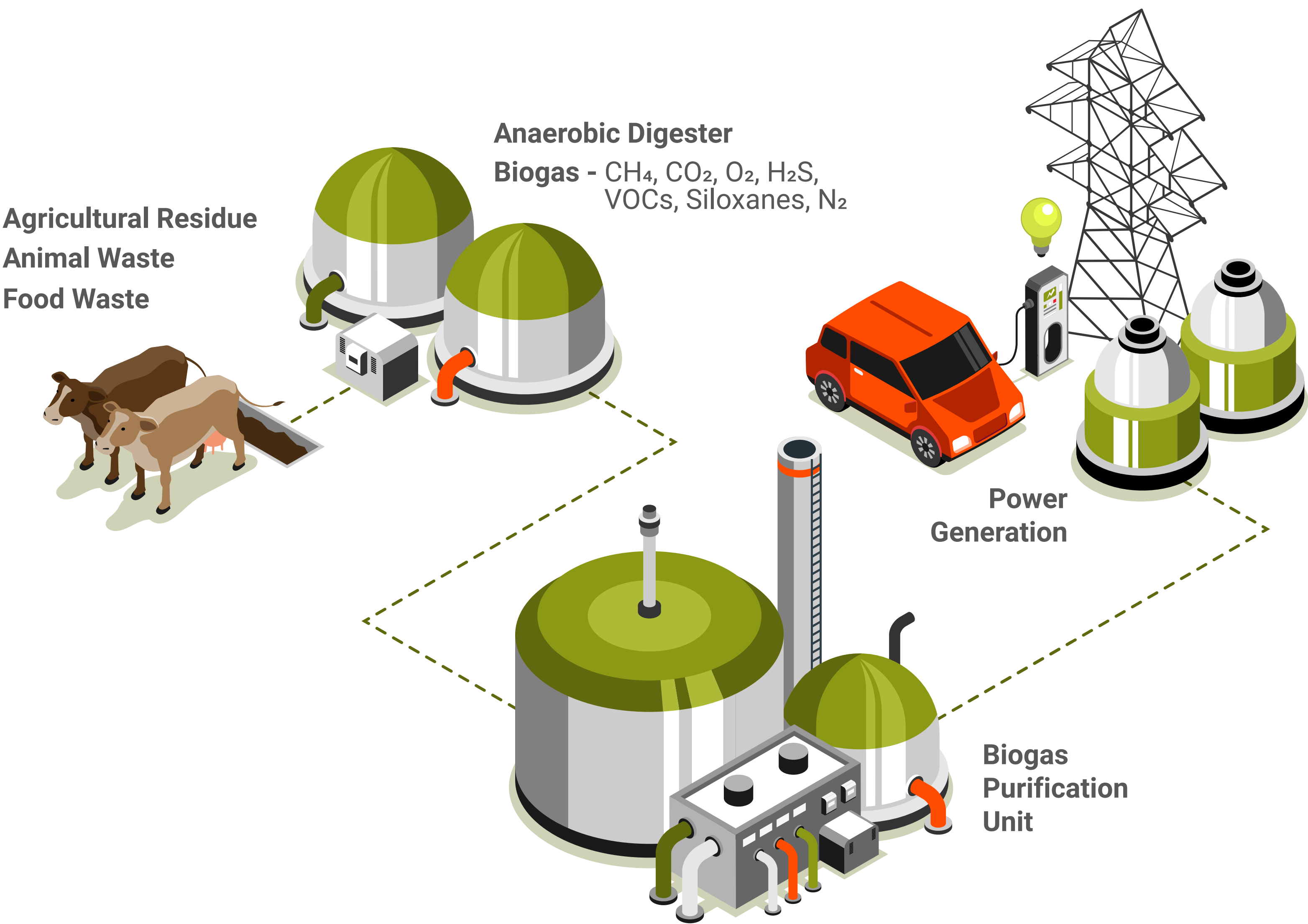


# BIOGAS PURIFICATION

“ Activated Carbon for Efficient  
Contaminant Removal in  
Biogas Treatment ”

Biogas from organic waste contains methane along with impurities like hydrogen sulfide (H<sub>2</sub>S), siloxanes, and volatile organic compounds (VOCs). Activated carbon filters are used in both pre-treatment and final polishing stages to remove these contaminants.



## HAYCARB'S SOLUTIONS

Haycarb offers a portfolio of activated carbon solutions engineered to purify biogas by effectively removing H<sub>2</sub>S, VOCs, siloxanes, and nitrogen. Our products are tailored to protect plant equipment, enhance operational efficiency, and ensure regulatory compliance in biogas upgrading systems.

### RIAS SERIES

A high efficiency extruded coconut shell pelleted activated carbon, specially formulated to remove H<sub>2</sub>S, siloxanes, and VOCs from biogas streams in high humid conditions.

Parameter	RIAS 2010	RIAS 2015	Test methods
Iodine No. (mg/g)	Min 1300	Min 1150	ASTM D4607
Moisture Content (w/w)	12-15	12-15	ASTM D2867
Apparent Density (g/cc)	Min 0.37	Min 0.40	ASTM D2854
Hardness No.	Min 96	Min 97	ASTM D3802
Ash % (% by wt)	Max 20	Max 20	ASTM D2866
H <sub>2</sub> S Capacity (% by wt) - Calculated	Typical 75	Typical 45	ASTM D6646
Particle Size (Diameter)	4mm	4mm	HAYCARB STP

RIAS 2010/2015 products perform well under 99% humidity conditions.

### RIAX SERIES

A high-efficiency granular coconut shell activated carbon to remove VOCs (Acetone, Methyl ethyl ketone, Benzene etc.) and Siloxanes.

Parameter	RIAX 1107	RIAX 1016	Test methods
CTC adsorption (% by wt) *	Min 50	Min 60	ASTM D4607
Moisture Content (w/w)	Max 5	Max 5	ASTM D2867
Apparent Density (g/cc)	Typical 0.48	Typical 0.45	ASTM D2854
Ash % (% by wt)	Max 3	Max 3	ASTM D2866
Hardness Number	Max 98	Max 98	ASTM D3802
Particle size *	4x8, 6x12	4x8, 6x12	ASTM D2862

\* Products can be customized for specific requirements.





RIAG SERIES

A high-efficiency extruded coconut-shell pelleted activated carbon to remove Nitrogen (N<sub>2</sub>) with Pressure swing adsorption (PSA) systems.

Parameter	Value	Test Method
Iodine No (mg/g)	Min 1150	ASTM D4607
Moisture Content (w/w)	Max 5	ASTM D2867
Apparent Density (g/cc)	Min 0.43	ASTM D2854
Ash % (% by wt)	Max 8	ASTM D2866
Particle size	4mm	HAYCARB STP

FEATURES & BENEFITS

- **Adsorption Efficiency:** Effectively removes multiple contaminants.
- **Extended Bed Life:** Ensure optimum contaminant removal capacity.
- **Engineered Performance:** Pelletized and granular forms tailored to varying flow and pressure conditions.
- **Sustainably Sourced:** Produced from renewable coconut shells, in line with Haycarb’s ESG commitments.



**PACKAGING:** Standard packaging is primarily designed to prevent the deterioration of accurately graded granules and to prevent the adsorption of moisture or atmospheric contaminants. Other packaging criteria can be accommodated upon request.

**BULK BAG**  
Net. 500 kg

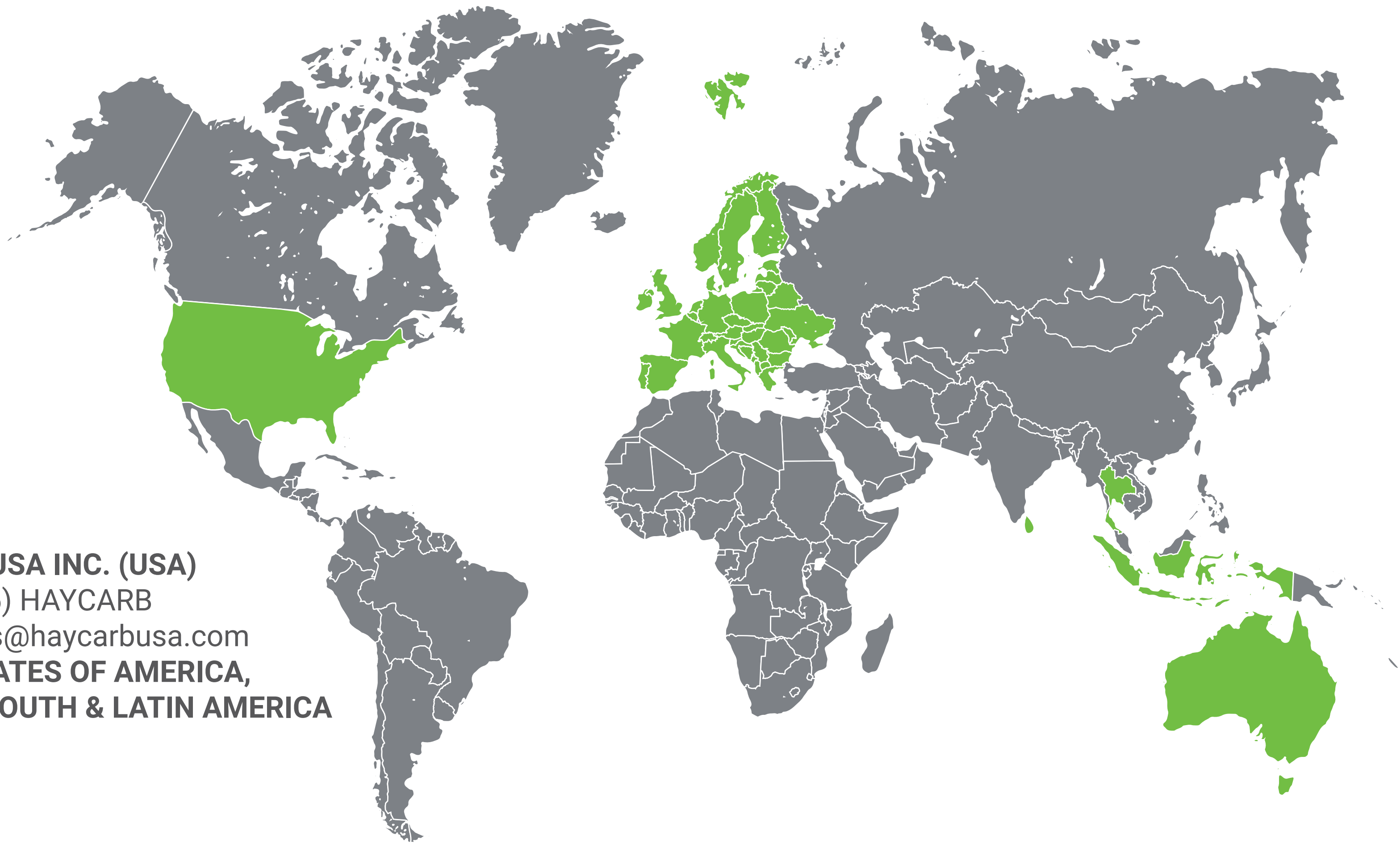
**SACKS**  
Net. 25 kg

**PE VALVE BAG**  
Net. 12.5 kg



‘ACTIVATE’ Haycarb’s  
ESG roadmap 2030

CONTACT US



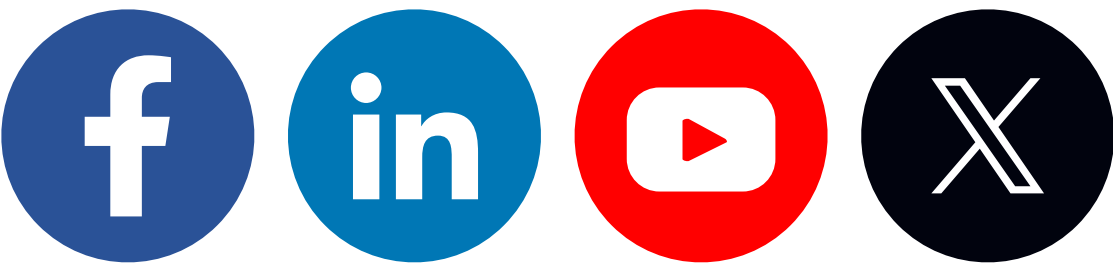
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