



GROWER DECK

2024



Are you interested in up to 30% more yield and revenue?

Are you interested in potentially doubling your profits?

Are you interested in higher grade produce that fetches higher prices?

Are you interested in being a more sustainable-branded grower and lowering your carbon footprint?

#### **Our Vision**

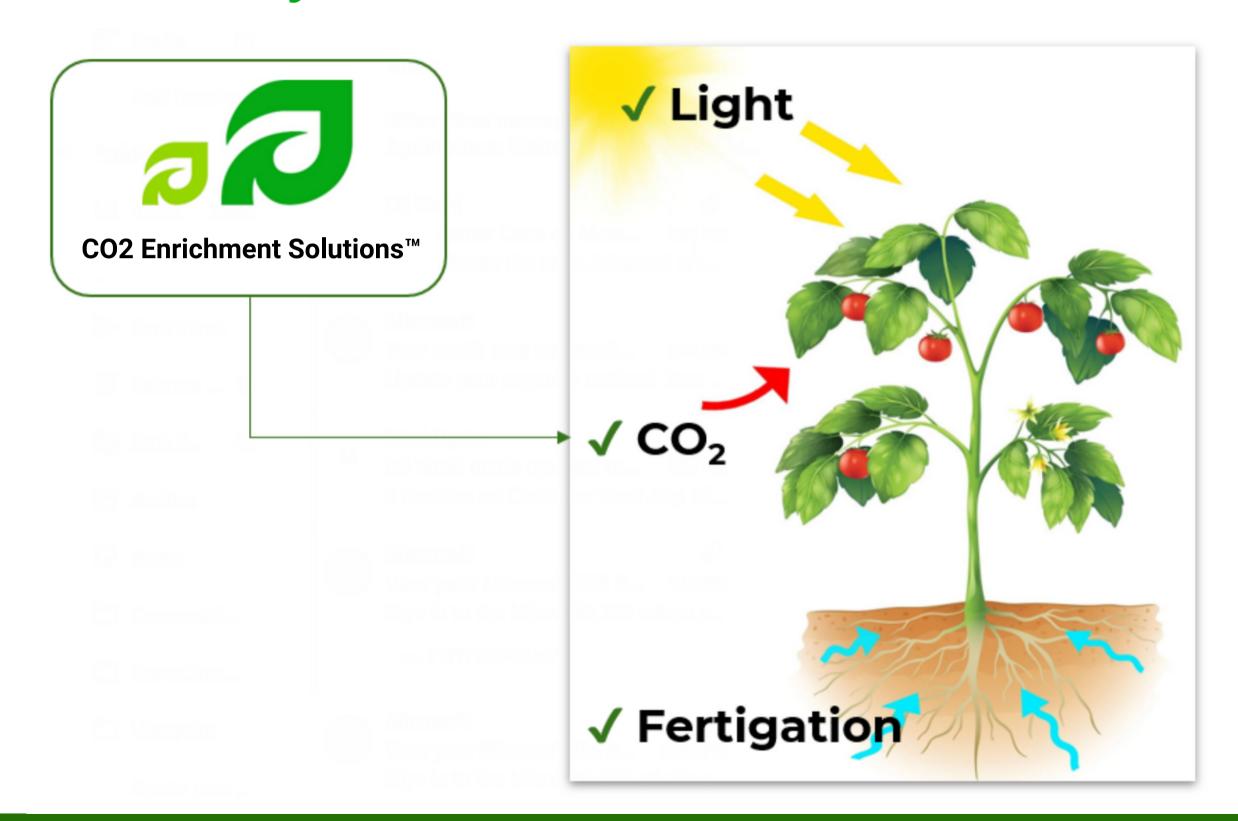
CO2 GRO Inc. (TSX.V: GROW | OTCQB: BLONF | Frankfurt: 4021) is a People, Planet, and Prosperity-focused precision ag-tech, clean-tech company.

Our vision is to transform 700 billion sq. ft. of protected fruit & vegetable growth facilities so they can increase yield by up to 30% and feed half a billion more people around the world.





#### Photosynthesis





#### Benefits of CO<sub>2</sub> enrichment

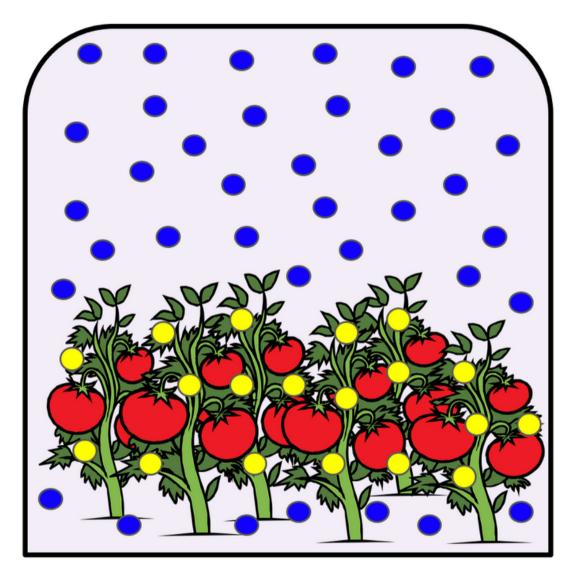
Accelerated photosynthesis

Faster plant growth

Increased plant production and quality

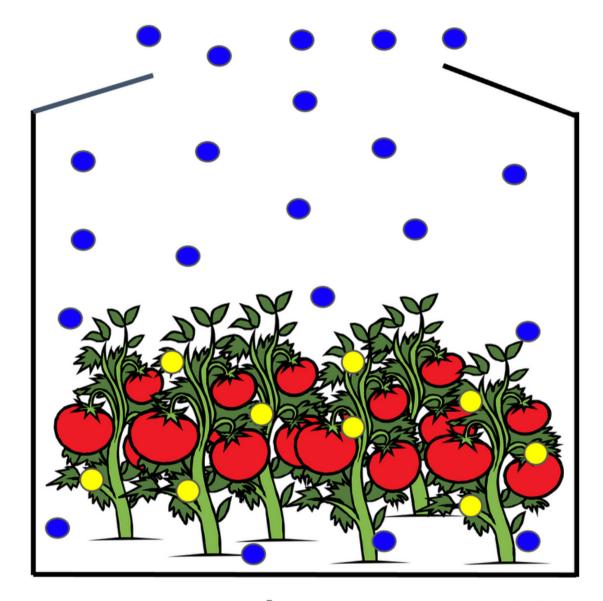


#### Traditional CO<sub>2</sub> Gassing



**Sealed facilities** 

- $\circ$  CO<sub>2</sub> gassing up to 1200 ppm
- CO<sub>2</sub> gas available for plants

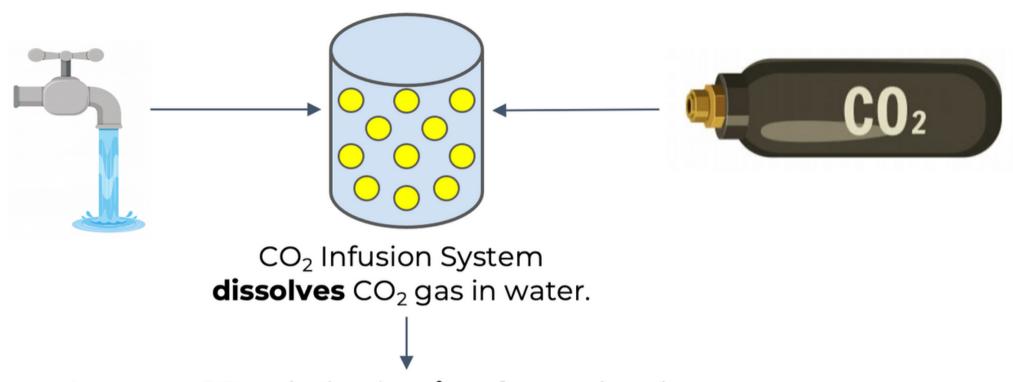


**Unsealed / venting facilities** 

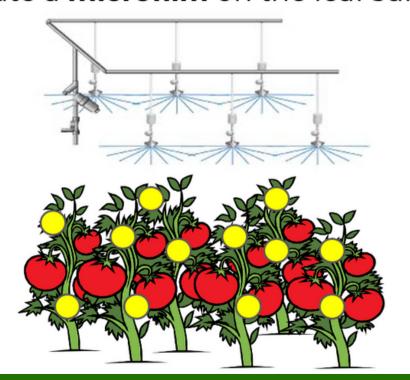
- Sub-optimal CO<sub>2</sub> 400 600 ppm
- Less CO<sub>2</sub> gas available for plants



#### CO2 GRO's Sustainable CO2 Enrichment



Aqueous CO<sub>2</sub> solution is **misted** onto the plants to create a **microfilm** on the leaf surface.

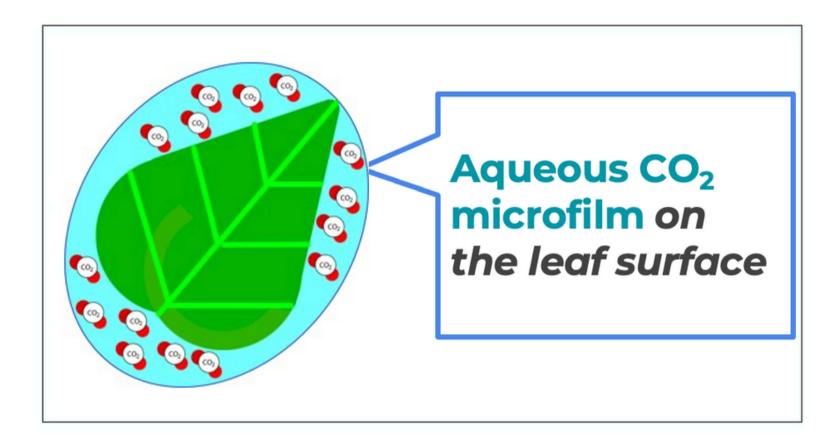




#### ATMOSPHERIC CO<sub>2</sub> ABSORPTION

# CO<sub>2</sub> in the air enters the leaf through its stomata stomata on the underside of a leaf

#### CO2 GRO's AQUEOUS CO2 ABSORPTION

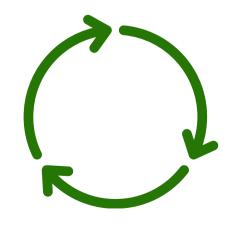




Aqueous CO<sub>2</sub> diffuses through the leaf's surface



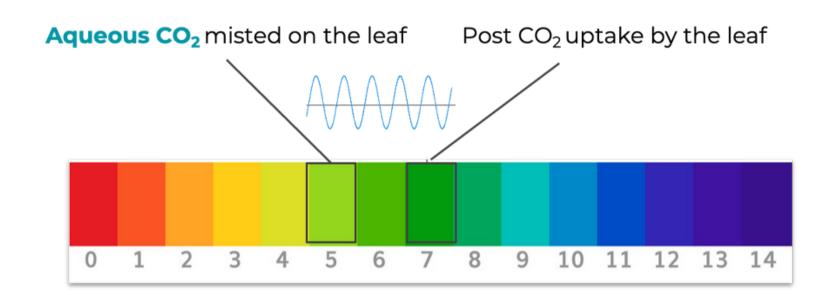
Aqueous CO<sub>2</sub> does not escape through venting



Aqueous CO<sub>2</sub> is provided to plants year-round



#### Pathogen Perimeter Protection (PPP)™



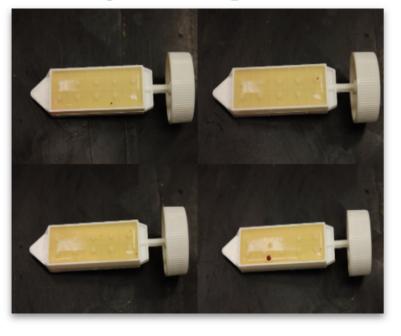


pH fluctuations on the leaf surface suppresses micro-pathogens such as mildew, mold, and bacteria



CO<sub>2</sub> gassing alone does not provide PPP

#### **AQUEOUS CO<sub>2</sub> MISTED**









PPP suppresses the spread of *E. coli* by 99% - as demonstrated by *E. coli* cultures on growth medium paddles at St. Cloud State University



#### C-stainable™ Crop Enhancement

#### C-STAINABLETM

Helping growers profitably reduce their carbon footprint, sustainably



- C-stainable<sup>™</sup> crop enhancement is the term we use for growing crops with CO2 GRO's CO2 Enrichment Solutions<sup>™</sup> technology
- Our vision is to have the C-stainable<sup>™</sup> logo as a brand enhancement tool for growers, distributors, marketers, retailers, and consumers







#### Increase Production, Increase Profits



#### **Typical Protected Grow Economics**

Increase production by 2-4 kg/m2
Increase revenue by ~\$50,000/ha/year
CO<sub>2</sub> gas usage cost ~\$10,000/ha/year
Increase gross profit by ~\$40,000/ha/year\*

\*does not include CO2 GRO PFU fee - see CO2 GRO pricing slide for commercial options



#### Environmental and Financial Sustainability

Typical CO<sub>2</sub> usage with atmospheric enrichment 30 MT/ha/month

CO<sub>2</sub> usage with aqueous
CO<sub>2</sub> misting
1 MT/ha/month





CO2
Enrichment
Solutions™
reduces CO2
usage,
emissions
and cost.



#### Benefits All Protected Grow Facilities



Tunnel



Net house



Shade house



Indoor vertical farm



Hoop house



Greenhouse



#### Lettuce Greenhouse Trial





**Top left:** CO<sub>2</sub> Infusion System

Top right: Lettuce greenhouse

Bottom right: Overhead misting





#### Microfilm created from top-to-bottom

#### Pepper greenhouse



**Tomato greenhouse** 



**Cucumber greenhouse** 





#### Bench Scale Study on Peppers

Metric	Aqueous CO <sub>2</sub>	*CO₂ gassing	Ambient CO <sub>2</sub>
Total Biomass	195 grams	192 grams	132 grams
Fruit Yield	8.5 fruit/plant	8 fruit/plant	7 fruit/plant
Harvest Time	22 days	22 days	25 days
Pathogen Suppression	Yes	No	No

- 20% more pepper fruit production vs ambient
- 10% faster growth vs ambient
- \*Impossible to maintain 1200 ppm CO<sub>2</sub> when venting



### Commercial Pepper Sales Success: \$1 Million Sales Contract To Date

Metric	Aqueous CO <sub>2</sub>	Ambient CO <sub>2</sub>
Kilos	49,885	41,977

Half hectare treatment vs half hectare control.



"After using CO2 GRO's aqueous CO<sub>2</sub> technology over the past two seasons, we have decided to expand its deployment to additional greenhouses at our facility and are confident that it can provide more benefits to our operations. We believe that the additional production and profits can help transform our business and enable us to expand our operations over the coming years. We look forward to cultivating our partnership with CO2 GRO and enhancing both our businesses for many years to come."

- Rodrigo Martinez, General Manager, Hidroexpo.

Note: First technology trial delivered 20% increase in pepper production, second trial delivered 30% after technology protocol optimization.



### Technology Trial with Cherry Tomatoes

- Overall kg/m² has increased by 10%
- Calibre 27 tomatoes (highest value) are now
   3% versus 1% of yield (3x increase)
- Calibre 25 tomatoes (second highest value) increased from 24% to 33% of total yield (37.5% increase)
- Quality defects are down 8%







### Technology Trial with Cucumbers

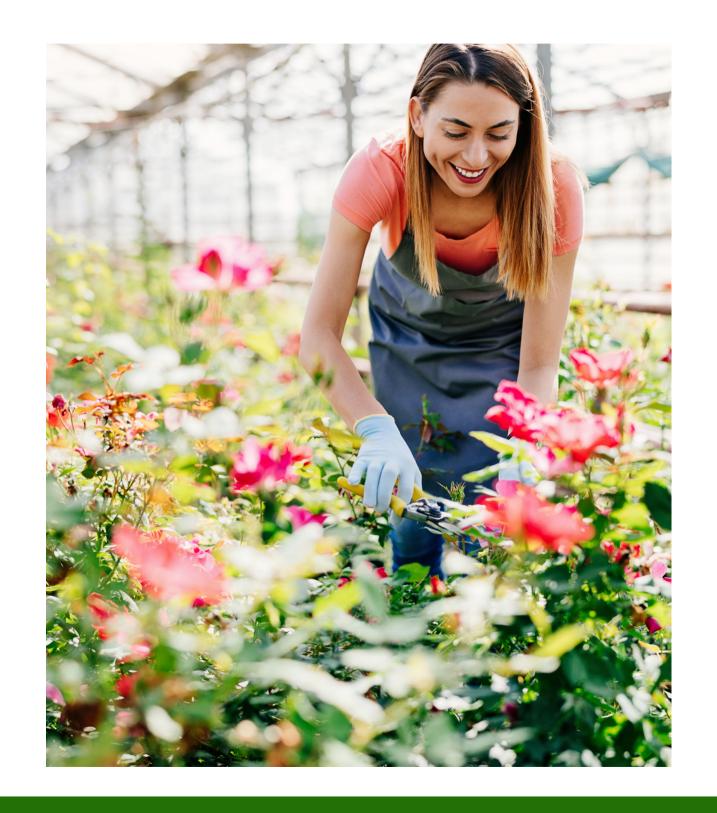
- 20% production increase in the first cycle.
- 37% production increase in the second cycle
  - CO2 GRO's Pathogen Perimeter
     Protection™ suppressed powdery mildew
  - Control block experienced powdery mildew outbreak
- \$500,000 commercial sales contract with a cucumber grower in Canada





### Technology Trial with Roses

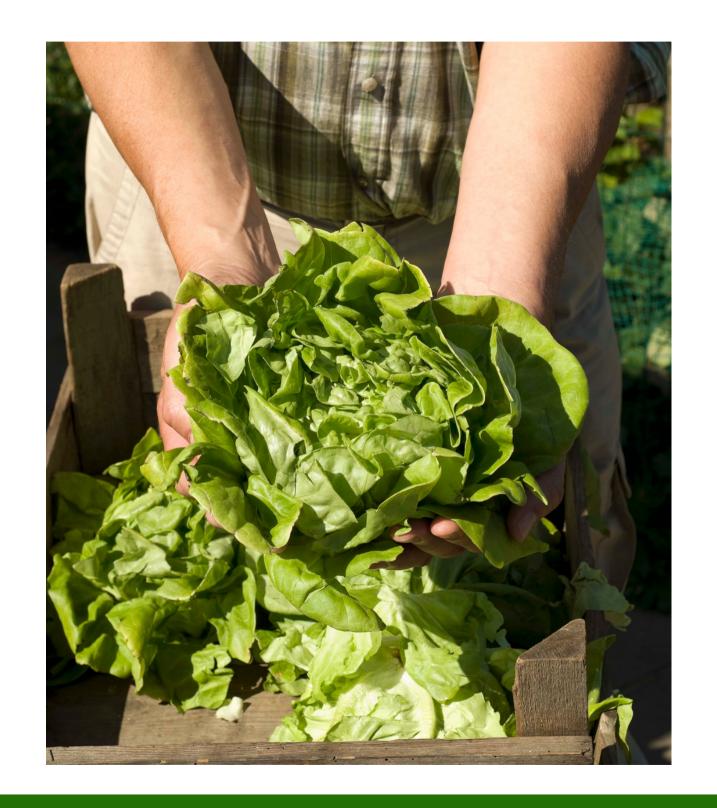
- Overall stem production from Jan 2023 to Dec 2023 increased by 35%
- High-grade high value roses realized a 21% production increase
- High-grade roses are over 55 cm in stem length and have 6 cm wide flower buds
- 75% reduction in powdery mildew spread due to CO2 GRO's Pathogen Perimeter
   Protection™





### Technology Trial with Lettuce

- 7 varieties tested
- Average biomass increase of 17%, with one variety yielding a 28% increase





#### **Current Crop Applications**















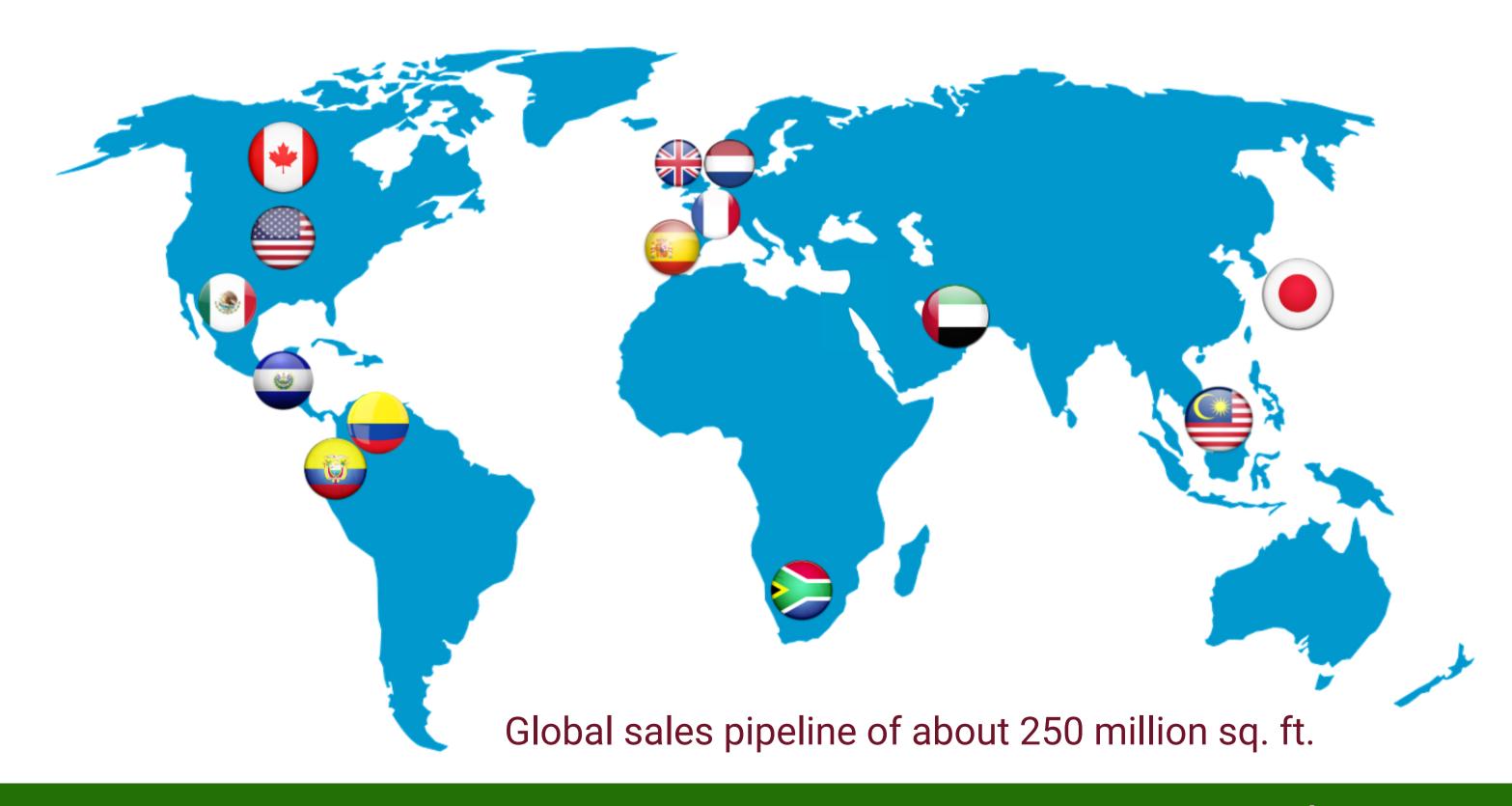
Berries







#### **Current Customers and Partners**





#### CO2 GRO Inc's Pricing

#### **Commercial Sales Contracts**

- Pay-for-Use/service contract
- Capital purchase

#### **Flexible Commercial Terms**

- PFU/service payments monthly, quarterly, or annually
- Third-party financing available for capital purchase





We provide the most effective CO<sub>2</sub> enrichment tool in your grower arsenal

We help increase your production by up to 30% or 2-4 kg/m2

We help increase your gross profit by an average of \$50,000 per hectare

We help reduce your leaf pathogens by up to 99%

We help reduce your CO₂ emissions, save you money and become a more C-stainable™ grower

We make realizing the benefits above easy and affordable for you



#### Become a Part of Our Vision



Join our team, in whatever capacity you can.

Adopt our technology, invest in us, work with us, or give us a like on social media.

- co2gro
- %/co2gro
- m/company/co2-gro-inc



#### **Contact Information**

## Get in touch with our team to learn more about your specific needs



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