

Energy Career and Leadership Webinar Series – Spring 2024

Fall in Love with the Problem - Lessons in Moonshot Taking, Climate and Entrepreneurship

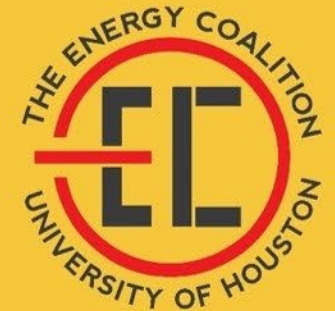
TIEEP

TEXAS INDUSTRIAL ENERGY
EFFICIENCY PROGRAM



UH Energy

UNIVERSITY OF HOUSTON



UNIVERSITY of HOUSTON | UH ENERGY



Fall in Love with the Problem - Lessons in Moonshot Taking, Climate and Entrepreneurship



Alan Rossiter

Executive Director, External
Relations & Educational Program
Development

UH Energy, University of Houston

Fall in Love with the Problem - Lessons in Moonshot Taking, Climate and Entrepreneurship

Confirmed Presenters



Rey Banatao, Ph.D. Director / Project Lead, X (formerly Google X)

Presentation Topic: Fall in Love with the Problem - Lessons in Moonshot Taking, Climate and Entrepreneurship

Don Victory. Founder and Chair of Energy Mentors; previously Upstream Chief Process Engineer at ExxonMobil

Presentation Topic: Defeating Career Anxiety



Sharon Nolen. Eastman Fellow; leader of Eastman's Global Natural Resource Management program.

Presentation Topic: From Raising Cows to Removing Carbon: A Personal Sustainability Journey

Jane Stricker. SVP and Executive Director, Houston Energy Transition Initiative (HETI), The Greater Houston Partnership.

Presentation Topic: Navigating a Successful Career in a Changing



Energy Industry

Dates: **Fridays February 9 - March 29, 2024 (excluding March 8 & 15)**

Time: **10am - 11am**

Location: **Webinar Series**

Sindhu Balan. Investment principal, Chevron Technology Ventures (CTV).

Presentation Topic: Many Routes to a Career Destination



Additional Presenters to be announced soon.

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Notes for Certificate Candidates

Open to students enrolled students at institutions of higher education
Registration must include institution & student ID

1. Use your unique, personal Zoom link for the webinars.
2. Complete each test by 11:59 pm the Thursday after the webinar. Passing grade: 80%

Instructions for tests

You were sent an invitation for Canvas: UH Online & Special Programs – Canvas Notifications
notifications@instructure.com

Use this to activate your Canvas account**.

Quizzes and other course materials are in Canvas.

Each quiz becomes available at the end of its webinar.

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Notes on Canvas**

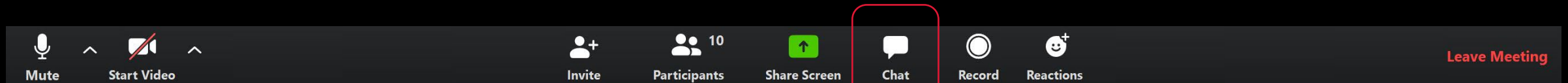
UH has two Canvas Systems:

1. College Credit courses (towards a degree): <https://canvas.uh.edu>
 - Cougarnet credentials and Duo for two-factor authentication
2. Continuing Education: <https://uhcontinuingstudies.instructure.com> **(Used for Certificate in Energy Leadership)**
 - Email address for login – the address you receive your course invitation from. Create your own password.

The two systems are completely separate. They may have different passwords, even if they use the same email address.

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Please stay muted with video off.
Submit your questions for our guest speaker during the live Q&A using the chat function in Zoom



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Today's Moderator

Sai Gudapati

Chair / UH Energy Coalition

Compliance Intern / BW Energy



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OUR STORY

THE LARGEST ENERGY-FOCUSED STUDENT ORGANIZATION IN THE U.S.

8

COLLEGES

34

STUDENT ORGANIZATIONS

30

MAJORS



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Upcoming Events

- Networking Event with Energy
- Career Readiness Sessions
- Crawfish Boil
- Hydrogen Symposium
- Banquet



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Rey Banatao, PhD

Director / Project Lead, *X* (formerly Google X)

CoFounder, Entropy Resins

CoFounder, Connora Technologies

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YOU
LOVE
IT



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**Nuclear Power Plant
San Onofre, CA**



INSPIRATION

**Chevron Refinery
Manhattan Beach, CA**



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TECHNOLOGY

YOU'RE
GOOD
AT IT

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Thermoset Composites



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Taking, Climate and Entrepreneurship

**MAKE
THINGS
BETTER**

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ENTROPY RESINS

MAKE THINGS BETTER



BIO-REFINERY



ENTROPY RESIN
TECHNOLOGY



SUPER SAP



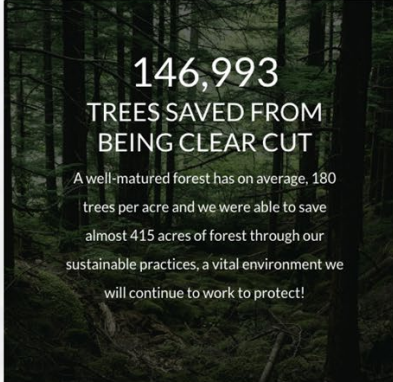
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**ENTROPY
RESINS**
MAKE THINGS BETTER


THE IMPACT

Manufacturing one gallon of Entropy Resins Epoxy with Super Sap technology in the Americas saves over the industry average:



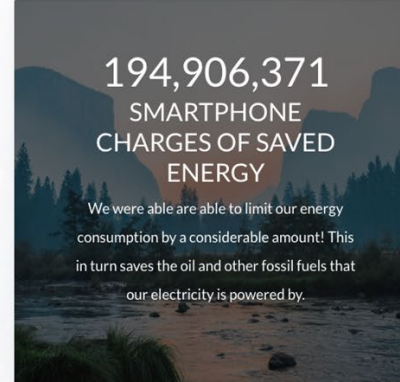
146,993
TREES SAVED FROM
BEING CLEAR CUT

A well-matured forest has on average, 180 trees per acre and we were able to save almost 415 acres of forest through our sustainable practices, a vital environment we will continue to work to protect!



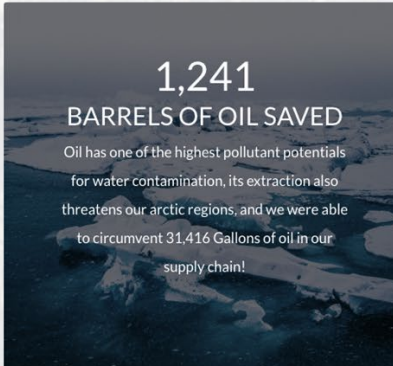
11,036
PROPANE CYLINDERS
(FOR A BACKYARD BBQ)
OF SAVED EMISSIONS

We saved the equivalent emissions of over 7,000 tanks of propane, one of the fossil fuels that contributes to the accumulation of greenhouse gases in our atmosphere.



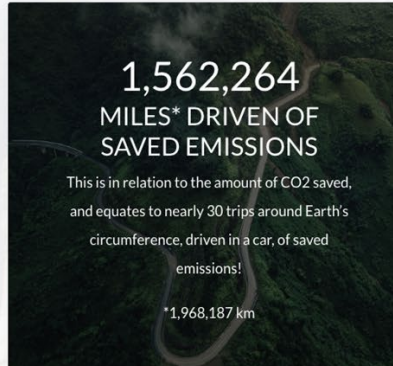
194,906,371
SMARTPHONE
CHARGES OF SAVED
ENERGY

We were able to limit our energy consumption by a considerable amount! This in turn saves the oil and other fossil fuels that our electricity is powered by.



1,241
BARRELS OF OIL SAVED

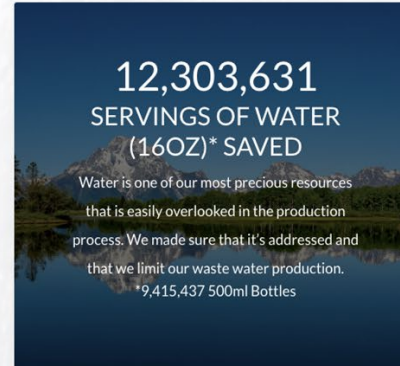
Oil has one of the highest pollutant potentials for water contamination, its extraction also threatens our arctic regions, and we were able to circumvent 31,416 Gallons of oil in our supply chain!



1,562,264
MILES* DRIVEN OF
SAVED EMISSIONS

This is in relation to the amount of CO2 saved, and equates to nearly 30 trips around Earth's circumference, driven in a car, of saved emissions!

*1,968,187 km



12,303,631
SERVINGS OF WATER
(16OZ)* SAVED

Water is one of our most precious resources that is easily overlooked in the production process. We made sure that it's addressed and that we limit our waste water production.

*9,415,437 500ml Bottles

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**FOR THE
PLANET.**



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 x 

WHERE DOES ALL THE STUFF GO?

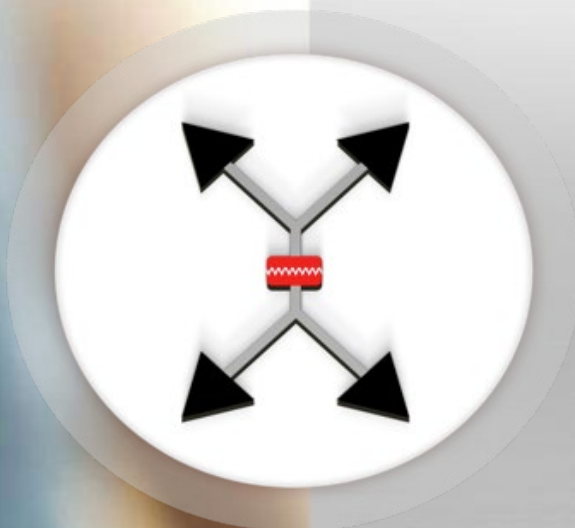
THE
WORLD
NEEDS
IT





connora

MATERIALS REIMAGINED



World's First Recyclable Wind Blade



x



Old windblade fragments in Wyoming landfill

Climate Capital Renewable energy [+ Add to myFT](#)

Siemens Gamesa claims first recyclable wind turbine blade



Use of new resin has potential to keep hundreds of thousands out of landfill

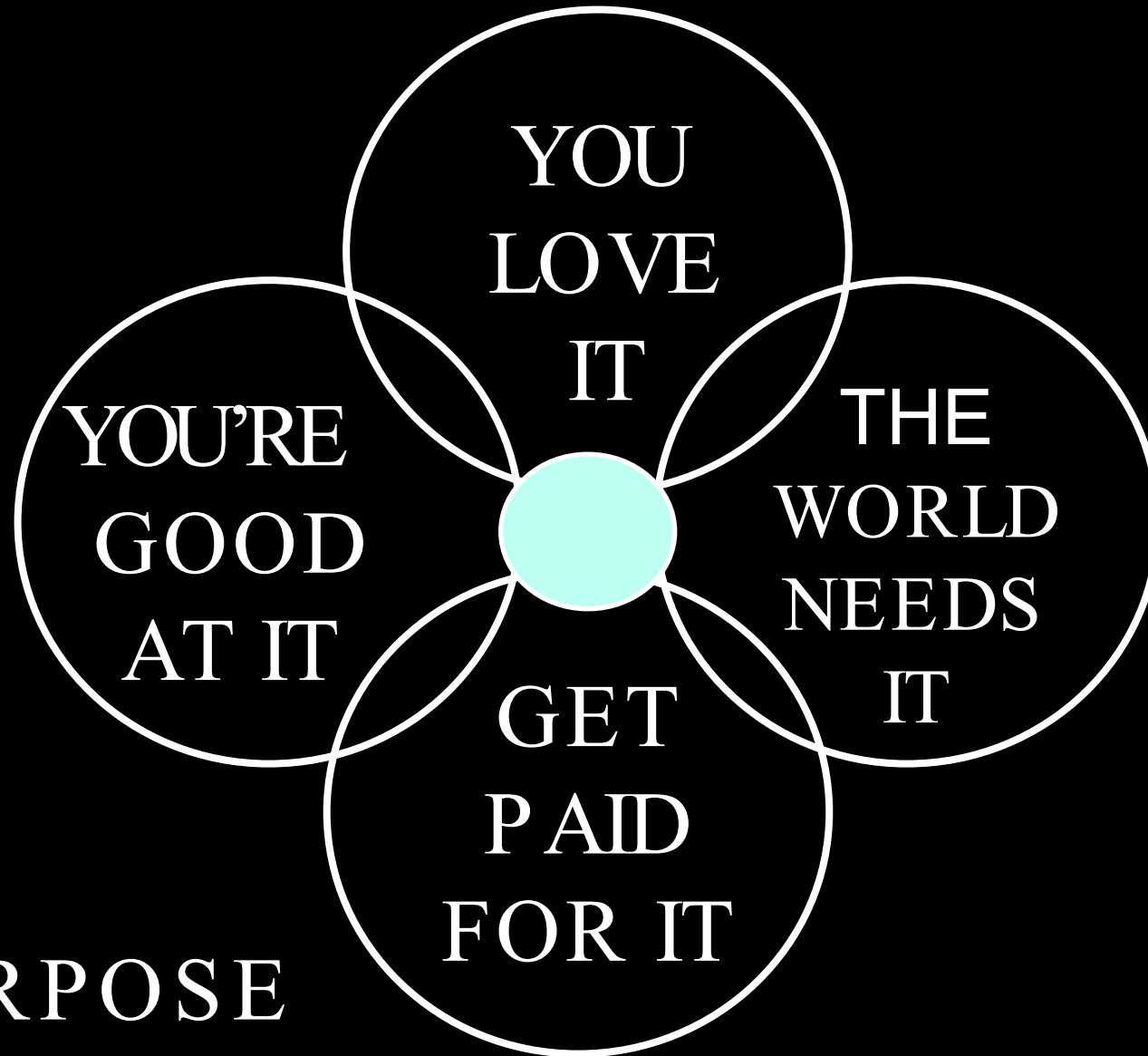
(Made with Recyclamine®)



Siemens Gamesa's new recyclable wind turbine blades are made from a mix carbon fibre © Siemens Gamesa



MAKE THINGS BETTER



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Manila, Philippines

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San Francisco, CA

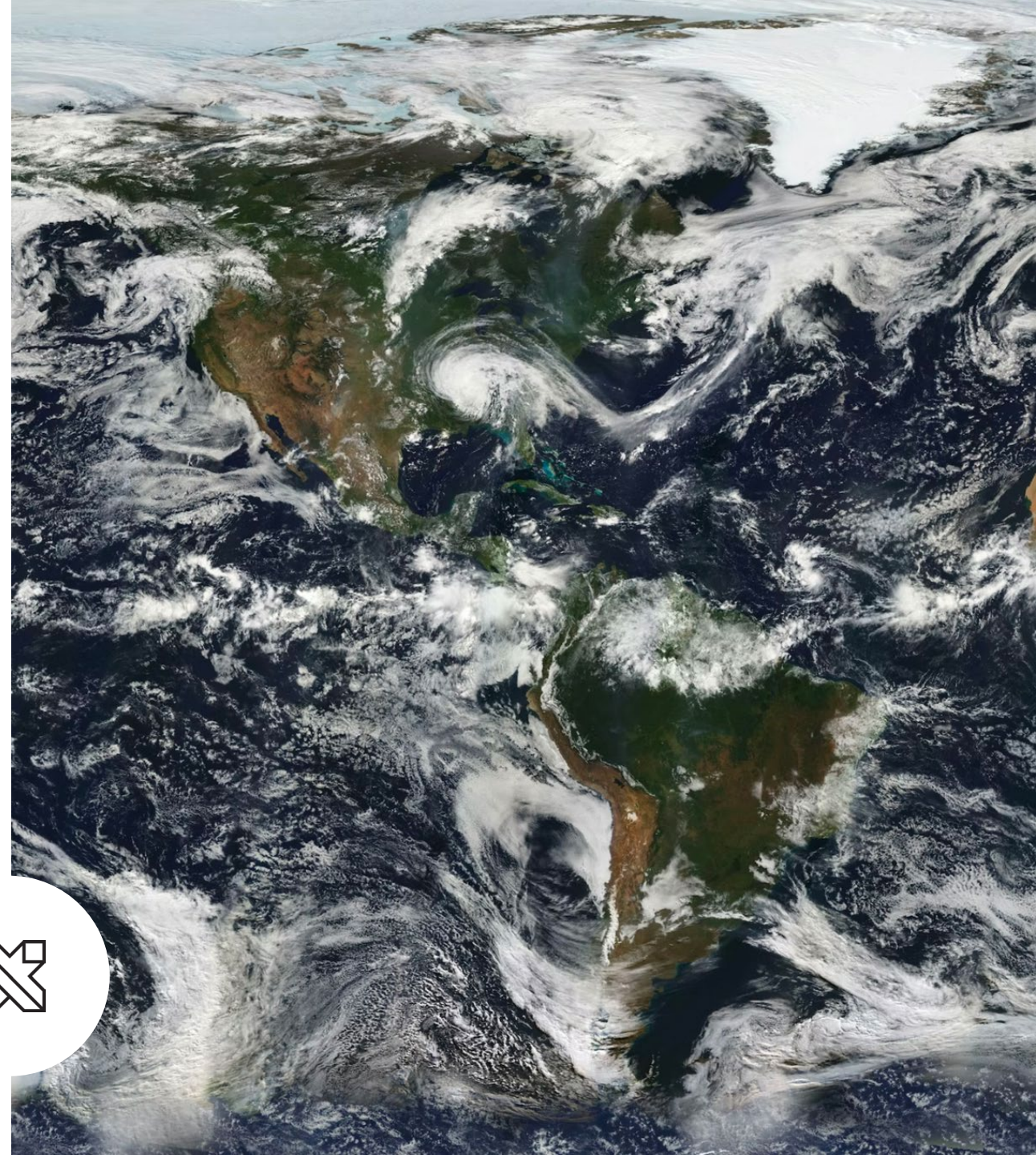
Invent and launch moonshots
that make the world a
radically better place



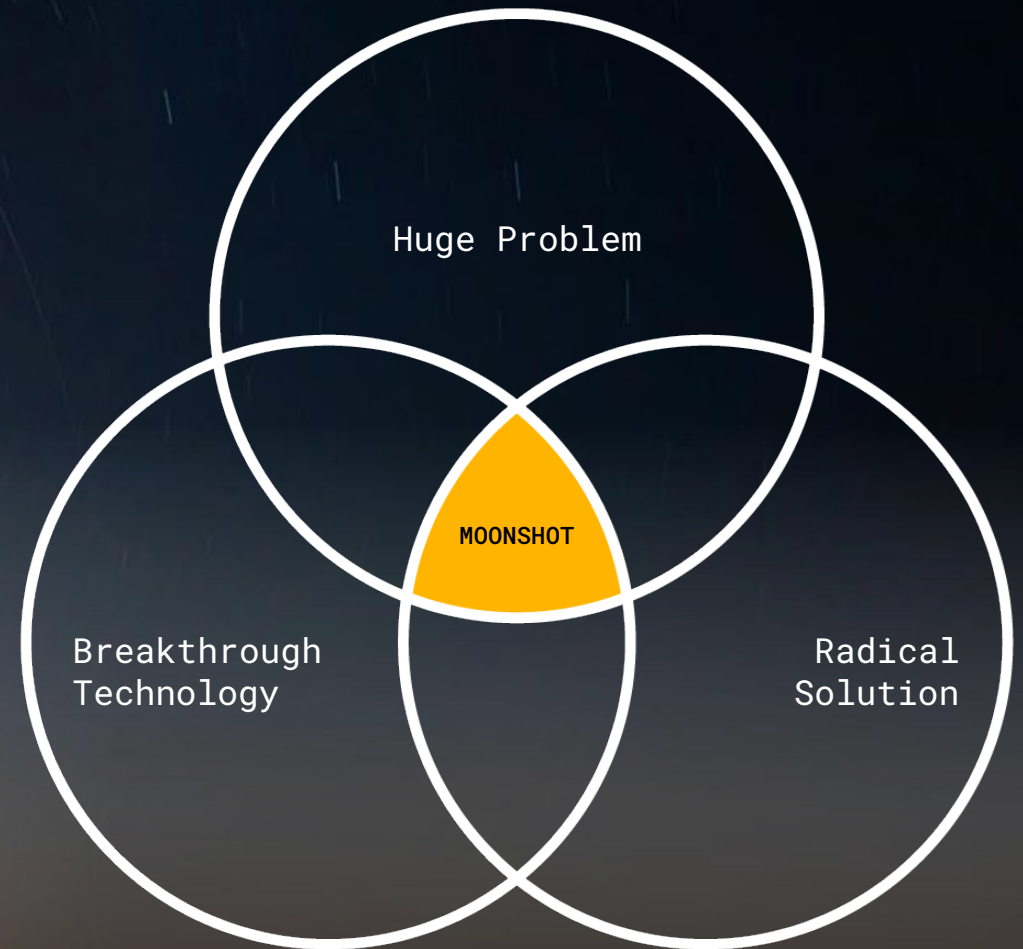
Climate and Sustainability

X has been working in the climate space for more than ten years and over the past five years X has been steadily increasing focus on this critical space.

More than half of X moonshots have the chance to meaningfully help with mitigating or adapting to climate change.



X'S BLUEPRINT FOR MOONSHOTS



5 principles for moonshot thinking

1. 10X not 10%


2. Work on the hardest thing first

3. Make contact with the real world

4. Fall in love with the problem

5. Embrace ~~failure~~ learning





Plastic waste is an economic,
environmental, and justice problem

321
MMT

Plastic landfilled per year.

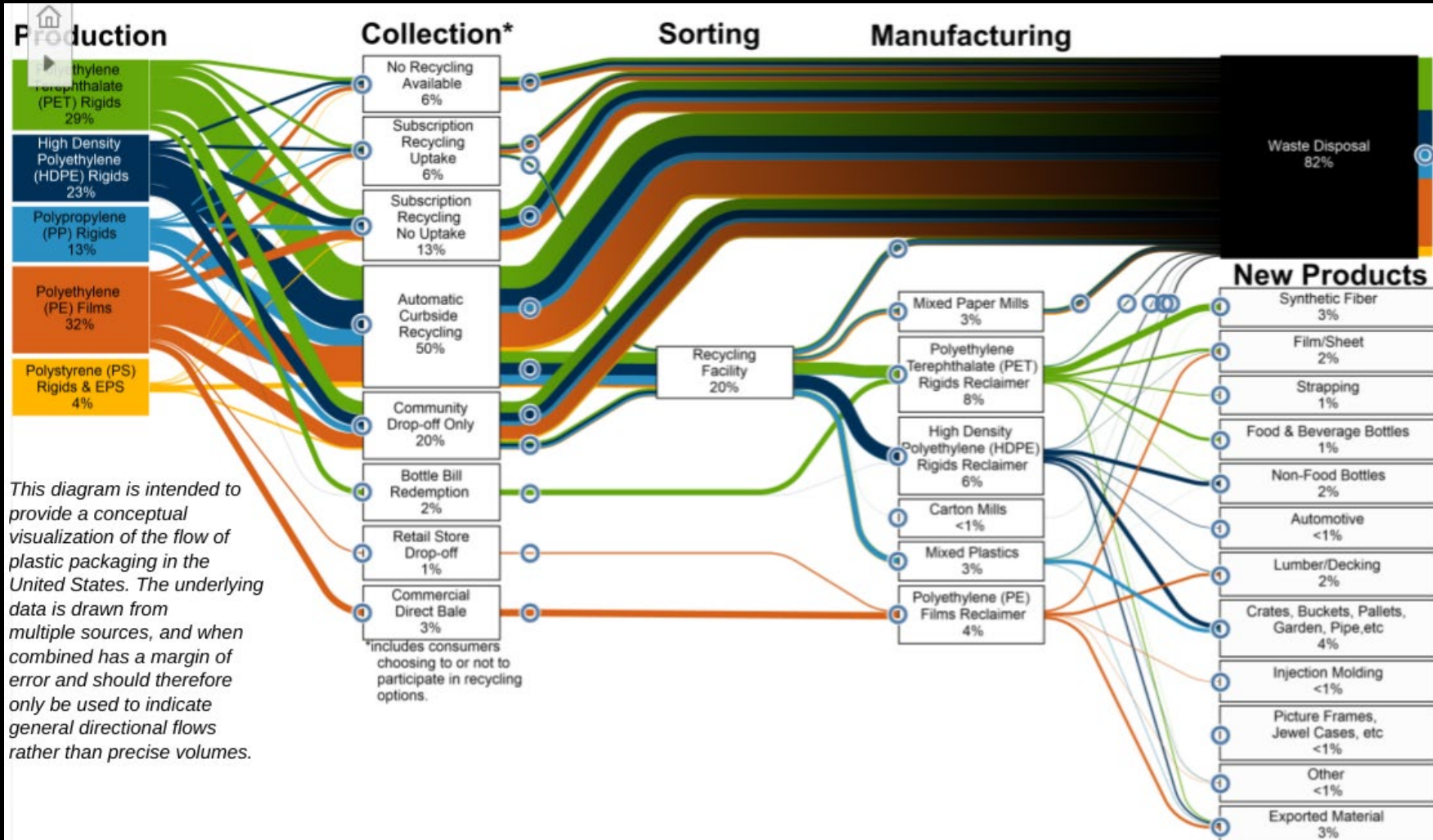
1.9 GT_{CO2e}

\$100 B

Global cost of plastic
pollution to environment
and human health per
year.

Sources: OECD, Merkel A & Charles D (2022)

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This diagram is intended to provide a conceptual visualization of the flow of plastic packaging in the United States. The underlying data is drawn from multiple sources, and when combined has a margin of error and should therefore only be used to indicate general directional flows rather than precise volumes.

Plastic recycling value chains are fragmented, resulting in the predominant disposal through incineration and landfills

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THANK YOU!

