VCE Community Advisory Committee Meeting
October 28, 2021 via video/teleconference

Item 8 – Cost-Based Rate Structure

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Item 8 – Cost-Based Rate Structure

Overview

- Background
- Proposed Cost-Based Rates Policy
- Proposed Cost-Based Rates Structure
- Recommendation/Next Steps

Purpose: Revise VCE's rate policy and customer rate structure enabling VCE to offer additional customer choice and set rates calibrated to actual cost and reserve requirements rather than indexed only to PG&E's generation rates + PCIA.

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Item 8 – Cost-Based Rate Structure

Background

- All electric utilities develop forecasts based upon informed technical estimates. Forecasts incorporate factors such as future weather, load, market power prices, and other business conditions. Actual outcomes inevitably vary and in extreme instances, outcomes may vary significantly.
- 2017 - VCE Implementation Plan: Program rates must collect sufficient revenue from participating customers to fully fund VCE's budget, including the need to establish sufficient operating reserve funds.
- 2020 – Strategic Plan: Maintain financial stability while continuing to offer customer choice, competitive pricing and establishment of local programs.
- 2018 – 2021 - VCE has systematically analyzed policy options and implemented strategies to stabilize customer rates, reduce cost, and manage reserves.
    - e.g.: Discontinue rate discount; scaled back REC purchases; sign long-term renewable PPA's
- 2020-2021 – Initiated research/development of cost-based rates and expanded customer rate structure

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Item 8 – Cost-Based Rate Structure

Background/Review

- Primary financial drivers remain the same from April/May 2021 analysis included in FY 2021/22 budget adoption
  - Power market costs continuing to increase above forecast increases (short-term 2022 prices +57% since May 2021); VCE hedging strategy
  - PCIA remaining high in 2021 at approx. $33.5M (+165% v. 2020 PCIA)
- Additional financial drivers impacting short and longer-term outlook
  - Scheduled Fall 2021 PG&E Generation Rate increase (1.5%) delayed
  - Error in financial estimations overvalued positive impacts of VCE's long-term PPA's
- Short-term outlook (2022 and 2023) continued volatility with associated financial challenges – Approx. $13M in additional forecasted costs; requires corrective action on rates to ensure cost recovery.
- Longer-term outlook (2024+) increased stability and cost certainty due to long-term PPA's and cost-based rate structure; rebuilt reserves + positive margins.

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Budget and Updated Forecast

Adopted Budget FY 2022 (June 2021)	Actuals FY2019	Actuals FY2020	ACTUALS UNAUDITED FY2021	ACTUAL YTD Aug 31 (2 MO) + FORECAST (10 MO) FY2022	Forecasted FY2023	Forecasted FY2024
Revenue	51,035	55,249	55,080	53,534	59,100	59,600
Power Cost	38,540	41,538	54,318	54,548	53,800	49,600
Other Expenses	3,850	4,346	4,267	4,857	5,100	5,200
Net Income	8,646	9,365	(3,505)	(5,871)	200	4,800

Corrected Model (October 1 Power Curve)	Actuals FY2019	Actuals FY2020	ACTUALS UNAUDITED FY2021	ACTUAL YTD Aug 31 (2 MO) + FORECAST (10 MO) FY2022	Forecasted FY2023	Forecasted FY2024
Revenue	51,035	55,249	55,080	53,534	59,100	59,600
Power Cost	38,540	41,538	54,318	57,592	62,223	51,062
Other Expenses	3,850	4,346	4,267	4,857	5,100	5,200
Net Income	8,646	9,365	(3,505)	(8,915)	(8,223)	3,338

1. Adopted and Corrected forecasts assume 5% increase in customer rates and 5% decrease in PCIA for 2022. PG&E's 2022 PCIA and gen. rates will modify revenues shown.
2. Total difference between Adopted and Corrected forecasts is approximately $13M over the FYs 2022 to 2024.

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Rate Actions Taken by Other CCA's

CCA	IOU Territory	% Difference to IOU (default product)
Clean Power SF	PG&E	+2%
MCE Clean Energy	PG&E	+7%
Pioneer Community Energy	PG&E	+6%
San Jose Clean Energy	PG&E	+8%
Sonoma Clean Power	PG&E	+5%
Clean Power Alliance (Los Angeles area)	SCE	+8%
Desert Clean Energy	SCE	+20%

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Proposed Cost-Based Rate Policy

- Current VCE Rate Policy: Match PG&E + Customer Dividend
- Proposed Cost-Based Rate Policy:
  - VCE will set customer rates to collect sufficient revenue from participating customers to fully fund VCE's budget and establish sufficient operating reserve funds.

  - Implementing Procedure (budget years 2022 and 2023): Over the next two budget years set customer rates to fully fund VCE's budget, as may be amended from time to time, and rebuild a minimum operating reserve of 30 days cash by the end of 2023; with a targeted operating reserve of 60 days cash by the end of 2023. Beginning in 2024, establish higher operating reserve targets to support Strategic Plan goals, including achieving an investment grade credit rating.

Item 8 – Cost-Based Rate Structure

Proposed Cost-Based Rate Structure

- Increase customer choice and incorporate cost-based rates for default and opt-up options.

Proposed Customer Rate Structure Design

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Proposed Cost-Based Rate Structure

The proposed customer rate structure incorporates the following:

1. **Rate Structure** - Three customer rate options – (1) Basic (new), (2) Standard (existing default), and (3) UltraGreen (existing opt-up)

2. **Customer Distribution**
   a. All CARE/FERA customers automatically opted down (approx. 27% of VCE load)
   b. Assumed additional customer load opt-down/out: 5%

3. **Portfolio/Price (renewable/GHG content)**
   a. Basic Green rate (new): competitive with PG&E generation rate (+/- 2%) and maintain minimum portfolio to comply with regulatory requirements; ineligible for customer dividend program.
      i. CARE/FERA customers maintain existing VCE multi-year portfolio mix for Standard default through 2023; shift to enhanced portfolio in 2024: PG&E renewable content plus a minimum of 5%.
   b. Standard rate (existing default): cost-based rate and maintain existing VCE multi-year portfolio mix.
   c. UltraGreen rate (existing opt-up): cost-based rate and maintain existing 100% renewable/GHG free mix.

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Rate Adoption Process

CAC Meeting – Late Oct

- Consider Cost Based Rate Structure – 3 rate options

Regular Board Meeting – Nov

- Consider Cost Based Rate Structure – 3 rate options

Regular Board Meeting – Dec

- Adopt budget and set 2022 rates based on PCIA & PG&E Gen Rates

Note: 2022 PCIA and PG&E Gen Rates scheduled to be filed Nov 8th.

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Updated Schedule Detail

- *Sept: Board direction; Based on Board direction, staff + CAC Task Group finalize draft rate policy and expanded and cost-based customer rate structure.*
- *Sept: CAC examination/feedback on draft rate policy and expanded and cost-based customer rate structure; input on customer outreach strategy.*
- *October: Board update/direction; draft policy/rate structure.*
- *October: Board special meeting; approved accelerated rate adjustment for Nov 2021 – Jan 2022.*
- **October 28 (current):** CAC consideration/recommendation on final draft policy/rate structure.
- Nov 8: PG&E 2022 rates and PCIA update released.
- Nov 10: Board consideration/action on final draft policy/rate structure.
- Nov 18: CAC update on 2022 PCIA and PG&E rates.
- Dec 9: Board adoption of calendar based fiscal year and budget; set 2022 VCE rates.
- Nov-Jan 2022: Execute customer outreach strategy.
- Jan 2022: Rates update report to Board/CAC.
- Feb 2022: Implement expanded and cost-based customer rates and structure.
- Post-implementation: Monitoring/reporting customer opt-out/opt-down activity.

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Recommendation

That the CAC recommend VCE Board adoption of the following:

a. Cost-based rate policy;
b. New rate structure with three customer options: (1) Standard Green (default) and (2) UltraGreen (100% renewable) with rates based on cost-recovery and add a (3) least-cost customer rate option;
c. Automatic enrollment of California Alternative Rates for Energy (CARE) and Family Electric Rates Assistance (FERA) customers in the newly created least-cost rate option with an enhanced portfolio beginning in 2024.

Next Steps

- Nov - Board consideration of Cost-based rate policy and structure
- Nov - CAC review of 2022 PCIA and PG&E rates
- Dec – Board adoption of VCE 2022 rates
- Feb 2022 – Implementation of Cost-based rates and structure

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Item 9 – Introduction to Community Resiliency

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Climate Resilience for Communities and Cities

Lorenzo Kristov, PhD
Electric System Policy, Structure, Market Design

VCE Community Advisory Committee
October 28, 2021

What is Resilience?

The ability to maintain essential quality of life functions and perform emergency services when a severe stress or disruption occurs

- Be prepared to provide for water supply, shelter, food, medical care, rescue, safety and security, wastewater, communications, mobility, moral support, …
  - *Most essential functions require energy* … At times when the electricity grid may fail

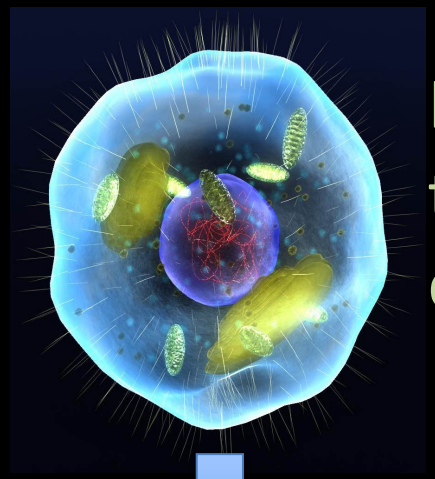
Disruptive events always have local and often fatal impacts

- Even widespread events have a local dimension: people, homes, neighborhoods

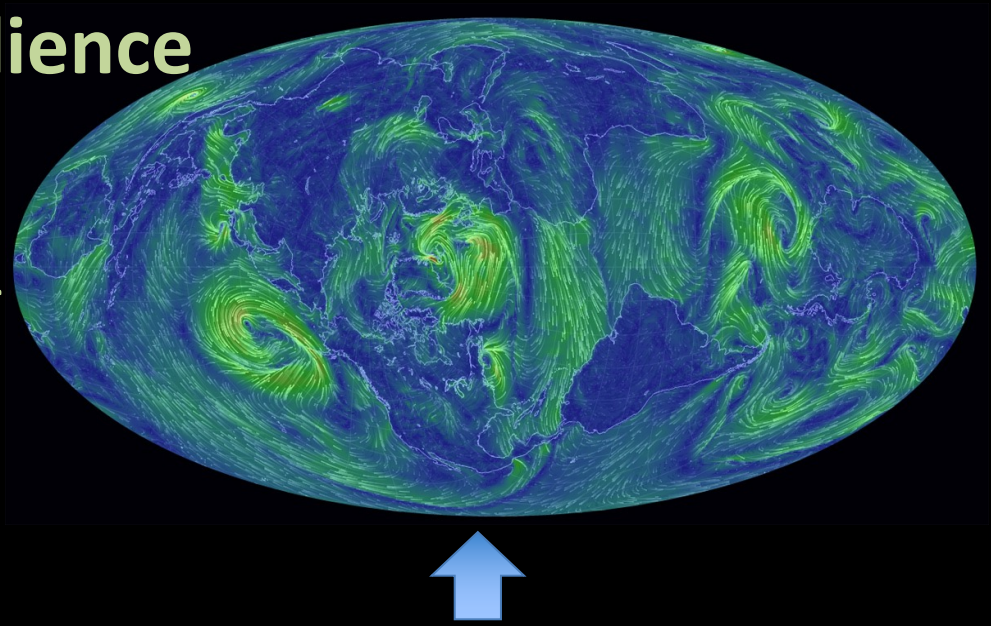
Resilience and Sustainability

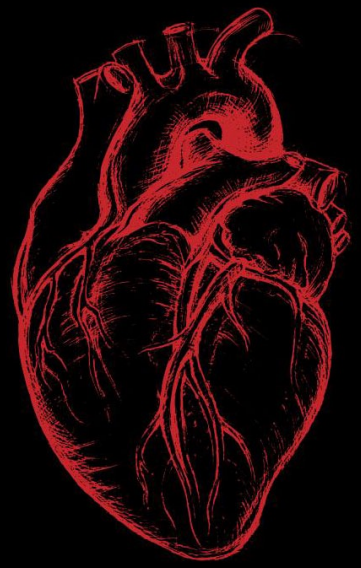
- **Sustainability => stop making things worse.** Transition to alternatives that replace practices that disrupt climate cycles and degrade ecosystems.
  - Future-oriented, longer-term efforts; e.g., transition away from fossil fuels.
- **Resilience => prepare for the impacts of damage already done.**
  - Preparation for near-term, immediate threats; adaptation & preparedness

Nature's Layered Architecture of Resilience



Learning from Nature:
the layered structures of
complex living systems





The Layered Architecture of Community Resilience

Household
* Physical/mental health
* Energy efficiency
* Smart EV charging
* Minimal waste
* Grey water recycling
* Low-water landscaping
* Micro-habitats
* Social connections
* Consume less stuff

Neighborhood
* Food production
* Car shares
* Tool libraries
* Places to meet, gather & celebrate
* Community energy
* Free-cycle
* Rainwater capture
* Tree canopy & solar PV in healthy balance

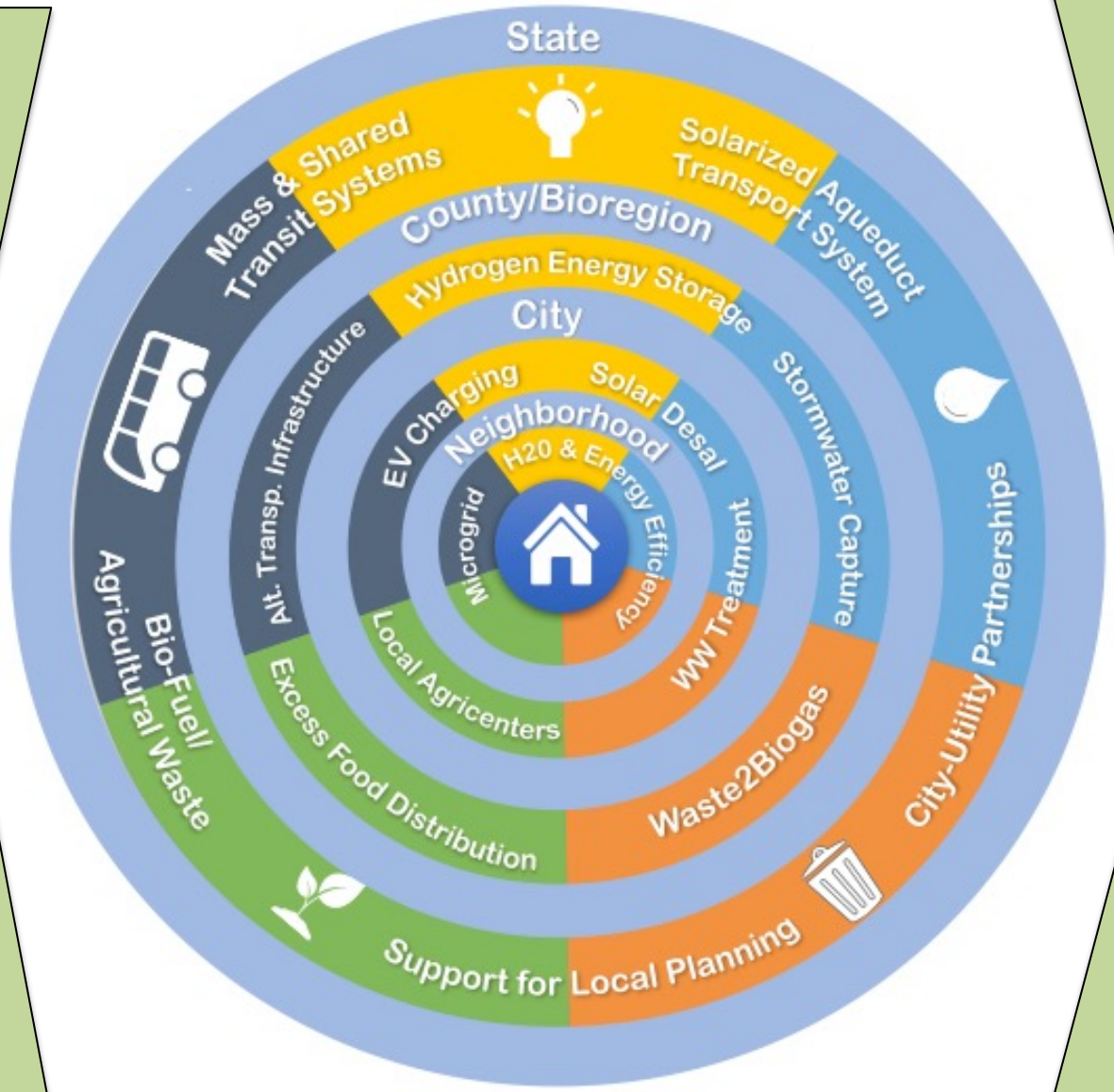


Image courtesy of World Business Academy
Santa Barbara, CA

State
* Policy, funding & structure for community resilience & local capacity building
* No community is left behind
* Remedy past inequities

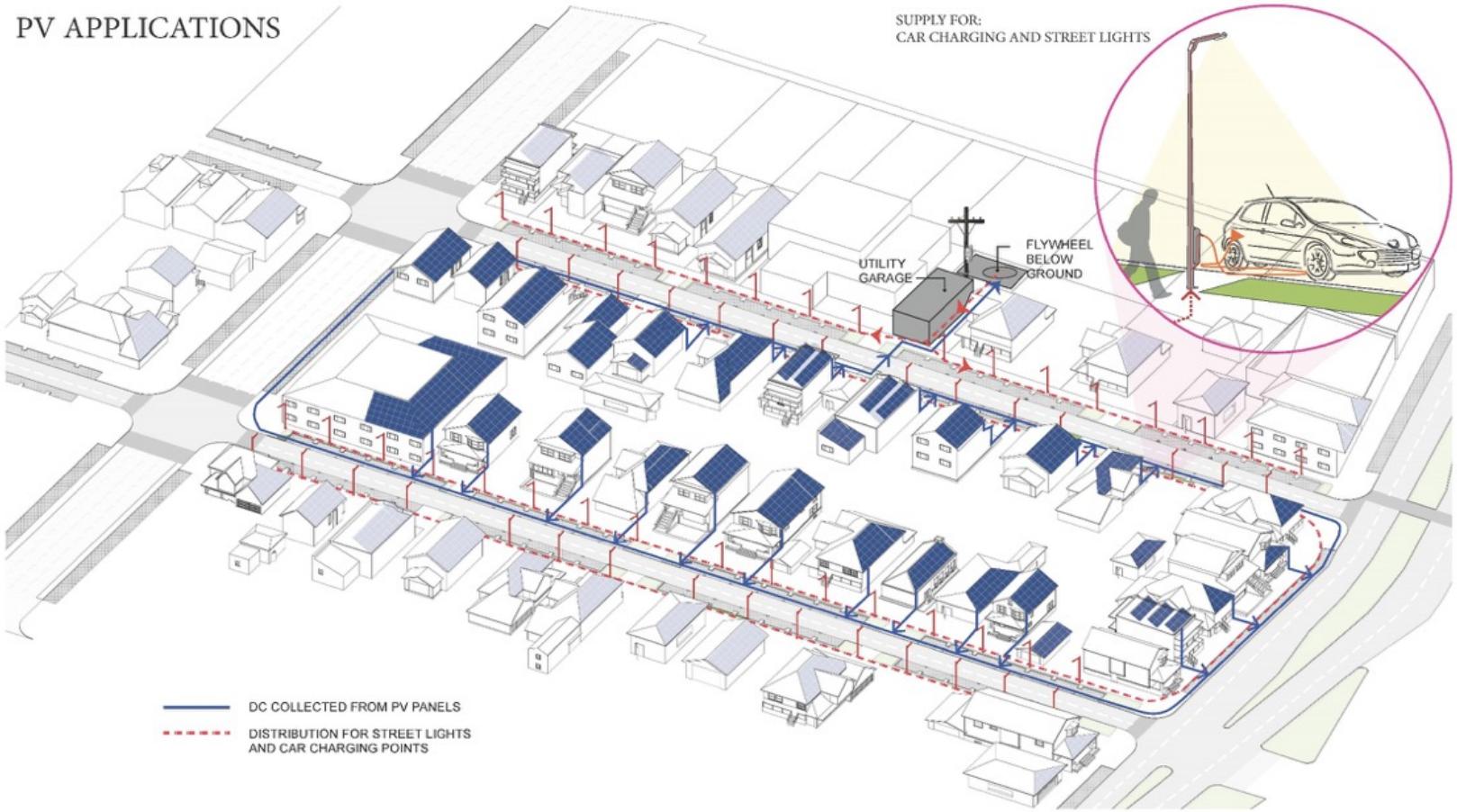
Bioregion
* Local food
* Waste mgmt
* Water mgmt
* Ecosystem protection
* Frontline communities

Municipality
* Systemic integration of critical services
* Public spaces
* Local businesses
* Repair & repurpose
* Transparency and public participation

Oakland EcoBlock: a retrofit model for resilient neighborhoods

Resilient electricity service for all customers on the block, integrated with water supply, stormwater capture, transportation, broadband telcoms, food production, …

- Communal rooftop solar PV
- Communal energy storage system (flywheel + battery)
- Intelligent loads and responsive electricity demand
- Shared EVs & coordinated charging
- Smart controls in a DC microgrid infrastructure (islanding capability)
- Single interconnection point to the utility grid



Revising the economy for resilience, sustainability and equity

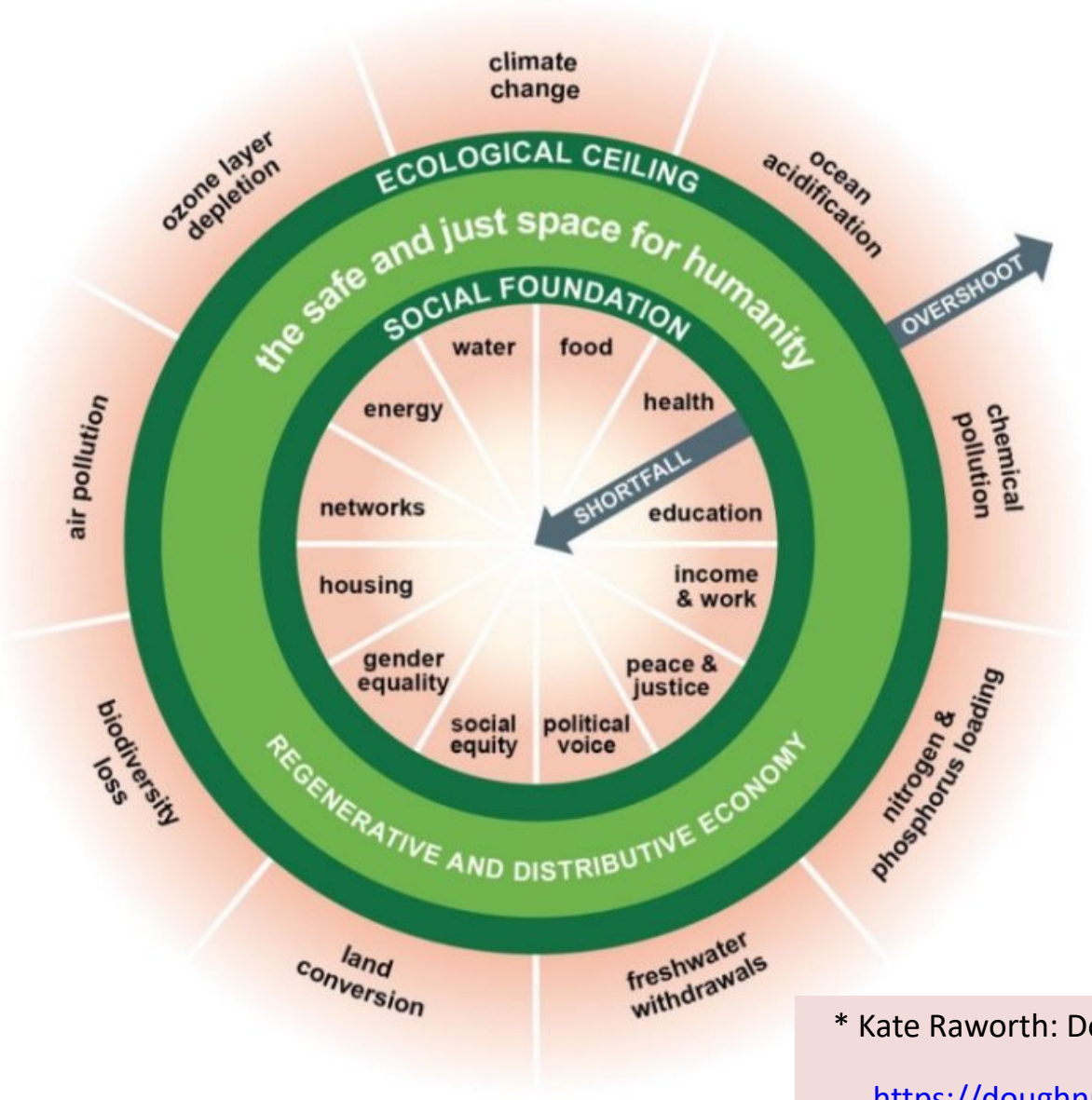
Conventional economics emphasizes more of everything: more consumption, more profits, more waste …

Based on the premise that consuming more makes us better off …

The ‘more’ economy artificially lowers prices by externalizing & hiding severe cost impacts on marginalized communities & life-sustaining ecosystems.

Doughnut Economics:
Redefine the goal of the economy to move into and stay in the green zones

“In order to change an existing paradigm you do not struggle to try and change the problematic model. You create a new model and make the old one obsolete.”
- R. Buckminster Fuller



* Kate Raworth: Doughnut Economics

https://doughnuteconomics.org