

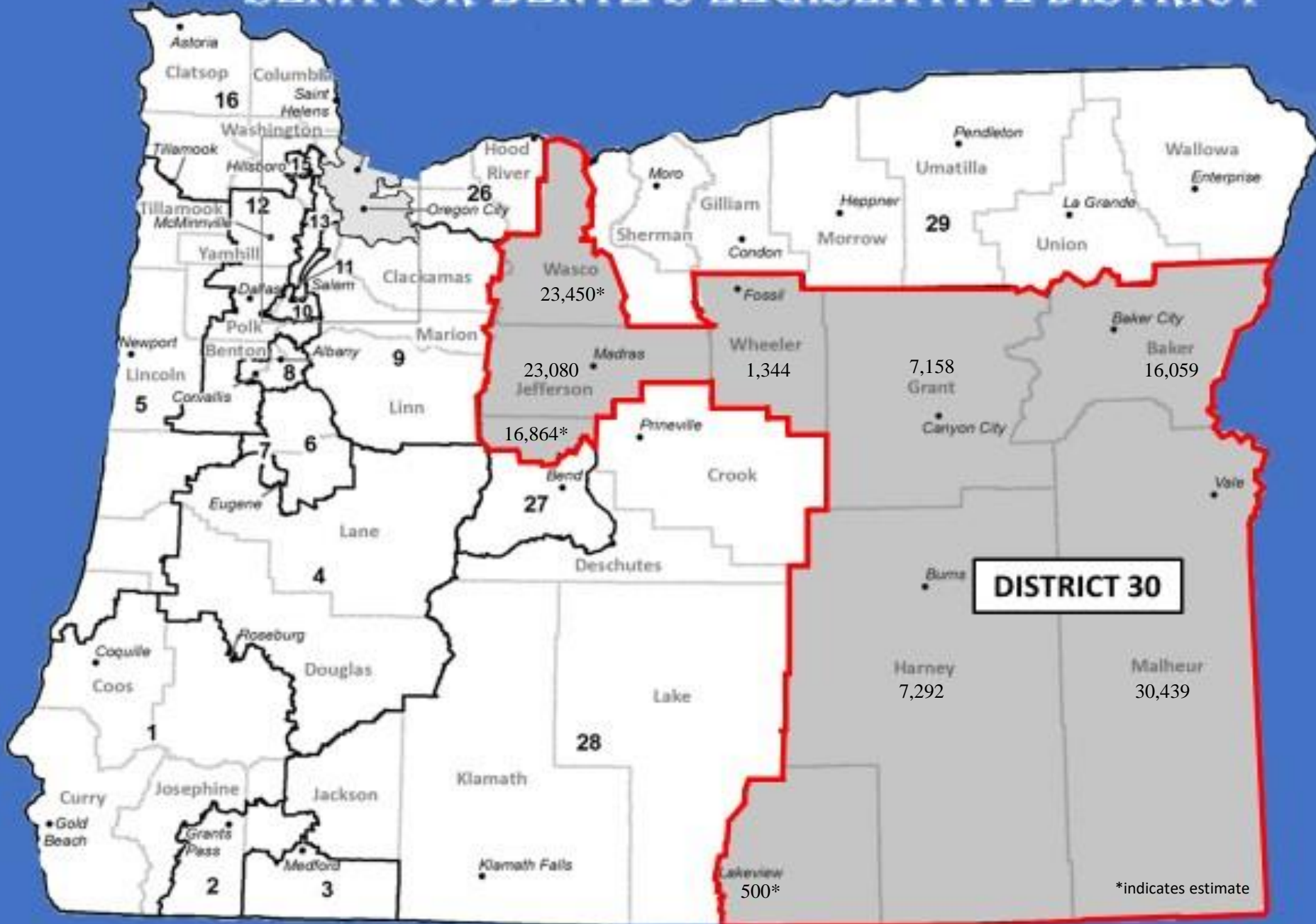
SENATOR CLIFF BENTZ

SENATE DISTRICT 30



Pillars of Rome, Rome, OR

SENATOR BENTZ'S LEGISLATIVE DISTRICT



OVERVIEW OF AMENDMENTS ADDRESSED IN THIS POWERPOINT:

- 73 (money to transition)
- 86 (protect hwy trust fund)
- 32 (Eastern Edge)
- 33 (Fund EITEs)

HB 2020 CREATES A MULTI-BILLION DOLLAR LIABILITY

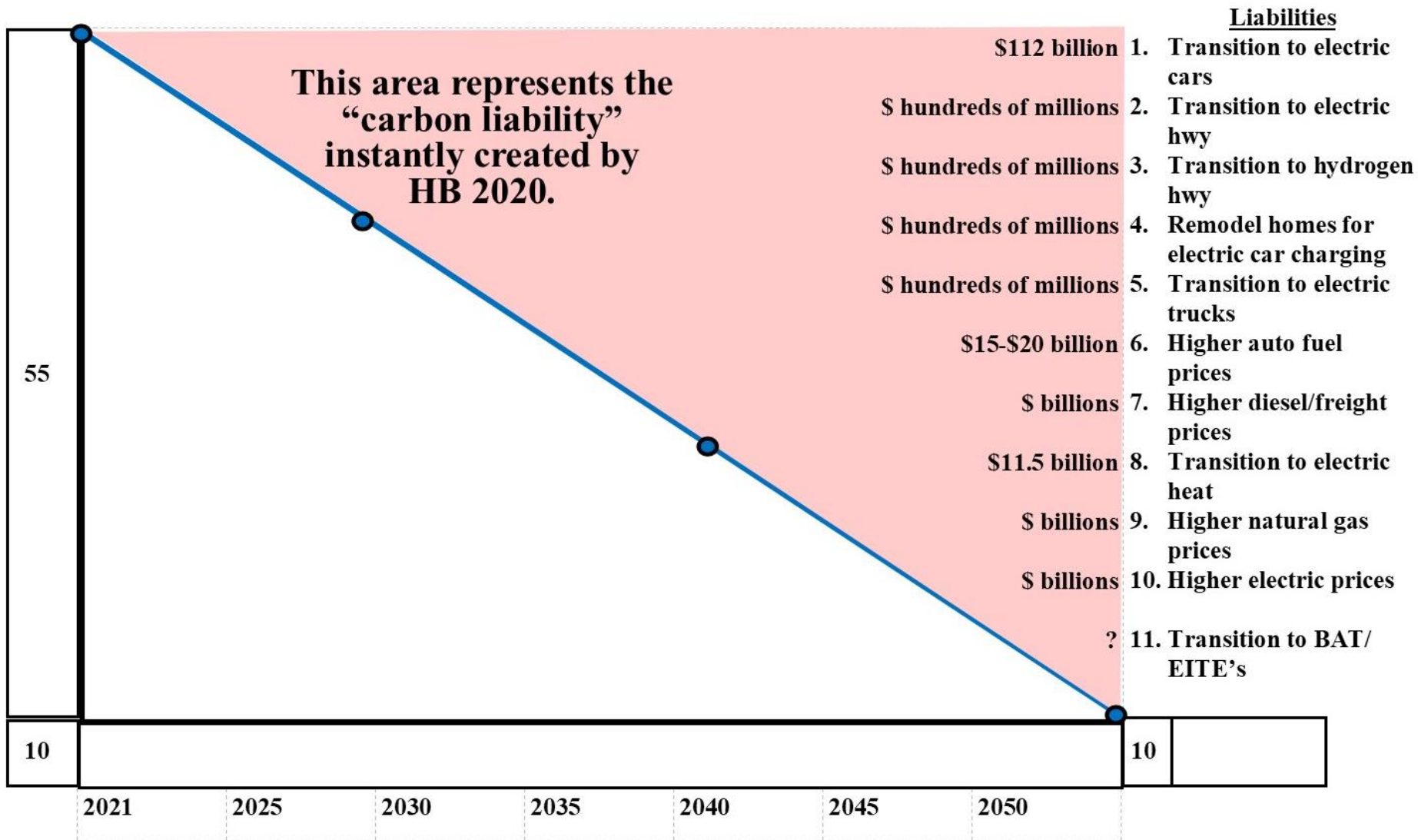


Chart 6

-73

ALL MONEY RAISED
SHOULD BE INVESTED
IN TRANSITION

ODOT EV CHARGING ESTIMATES

| Year | Electric Vehicles | Chargers Needed | | | Additional Chargers Required | | Cost | | |
|------|-------------------|-----------------|----------------|---------|------------------------------|---------|----------------|----------------|----------------|
| | | Total | DC Fast Charge | Level 2 | DC Fast Charge | Level 2 | DC Fast Charge | Level 2 | Total Cost |
| 2019 | 26,000 | 1,010 | 159 | 852 | - | - | \$ - | \$ - | \$ - |
| 2020 | 32,000 | 1,244 | 195 | 1,048 | 76 | - | \$ 4,194,215 | \$ - | \$ 4,194,215 |
| 2021 | 41,000 | 1,593 | 250 | 1,343 | 131 | 43 | \$ 7,214,619 | \$ 432,958 | \$ 7,647,577 |
| 2022 | 50,000 | 1,943 | 305 | 1,638 | 186 | 338 | \$ 10,235,023 | \$ 3,381,656 | \$ 13,616,679 |
| 2023 | 63,000 | 2,449 | 384 | 2,064 | 265 | 764 | \$ 14,597,829 | \$ 7,640,886 | \$ 22,238,716 |
| 2024 | 81,000 | 3,148 | 494 | 2,654 | 375 | 1,354 | \$ 20,638,638 | \$ 13,538,282 | \$ 34,176,920 |
| 2025 | 104,000 | 4,042 | 635 | 3,407 | 516 | 2,107 | \$ 28,357,449 | \$ 21,073,844 | \$ 49,431,292 |
| 2026 | 128,000 | 4,975 | 781 | 4,194 | 662 | 2,894 | \$ 36,411,860 | \$ 28,937,038 | \$ 65,348,898 |
| 2027 | 158,000 | 6,141 | 964 | 5,177 | 845 | 3,877 | \$ 46,479,874 | \$ 38,766,032 | \$ 85,245,906 |
| 2028 | 187,000 | 7,268 | 1,141 | 6,127 | 1,022 | 4,827 | \$ 56,212,287 | \$ 48,267,392 | \$ 104,479,679 |
| 2029 | 216,000 | 8,395 | 1,318 | 7,077 | 1,199 | 5,777 | \$ 65,944,701 | \$ 57,768,752 | \$ 123,713,453 |
| 2030 | 244,000 | 9,483 | 1,489 | 7,994 | 1,370 | 6,694 | \$ 75,341,514 | \$ 66,942,480 | \$ 142,283,993 |
| 2031 | 272,000 | 10,571 | 1,660 | 8,912 | 1,541 | 7,612 | \$ 84,738,327 | \$ 76,116,207 | \$ 160,854,534 |
| 2032 | 301,000 | 11,698 | 1,837 | 9,862 | 1,718 | 8,562 | \$ 94,470,740 | \$ 85,617,567 | \$ 180,088,307 |
| 2033 | 333,000 | 12,942 | 2,032 | 10,910 | 1,913 | 9,610 | \$ 105,209,955 | \$ 96,101,827 | \$ 201,311,782 |
| 2034 | 366,000 | 14,225 | 2,233 | 11,991 | 2,114 | 10,691 | \$ 116,284,771 | \$ 106,913,719 | \$ 223,198,490 |
| 2035 | 400,000 | 15,546 | 2,441 | 13,105 | 2,322 | 11,805 | \$ 127,695,187 | \$ 118,053,245 | \$ 245,748,432 |

DC Fast Charge Cost \$ 55,000

Level 2 Cost \$ 10,000

Chargers Needed based on CA deployment of 1 charger per 25.73 vehicles; Norway has the highest EV share of any nation and has 1 charging station for 31 Evs (<https://evadoption.com/what-is-the-ideal-ratio-of-evs-to-charging-stations/>)

DC Fast Chargers and Level 2 based on current deployment rate-- 15.7% DCFC, 84.3% Level 2 (<https://evadoption.com/ev-charging-stations-statistics/>)

Assumes each station has 1 outlet

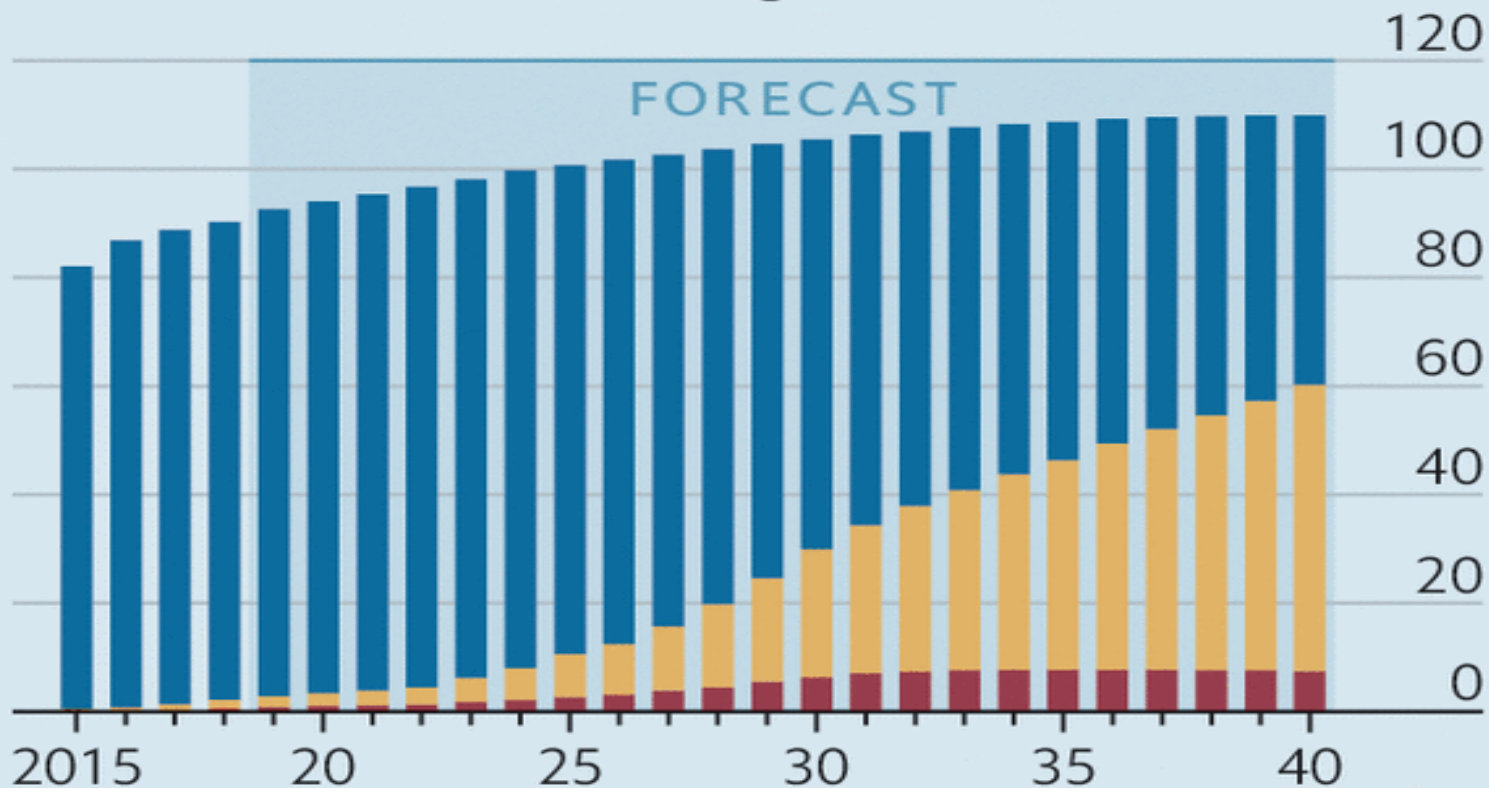
EV # based on STS Vision goal of approximately 400,000 EV's and PHEV's in 2035.

SOURCE: ODOT, April 2019

Volt-face

Worldwide light-vehicle sales, m

■ Plug-in hybrid ■ Battery-electric
■ Internal-combustion engine



Source: Bloomberg New Energy Finance

The Economist

<https://www.economist.com/business/2019/04/17/big-carmakers-are-placing-vast-bets-on-electric-vehicles>

Slide prepared by Senator Bentz's office—calculations & estimates should be verified before being quoted.

ODOT EV ESTIMATES

- The Statewide Transportation Strategy calls for 9% of Oregon's roadways to be electric by 2035.
- This translates into approx. 400,000 electric vehicles on the road by 2035.
- ODOT assumes it will cost approx. \$10,000 to purchase, permit, and install a Level 2 charging station, and about \$55,000 for a DC Fast Charger.
- However, ODOT's cost of deployment for the West Coast Electric Highway DC fast chargers was substantially higher at approx. \$100,000 per station.

SOURCE: ODOT, April 2019

ESTIMATED NUMBER OF ELECTRIC CARS IN OREGON

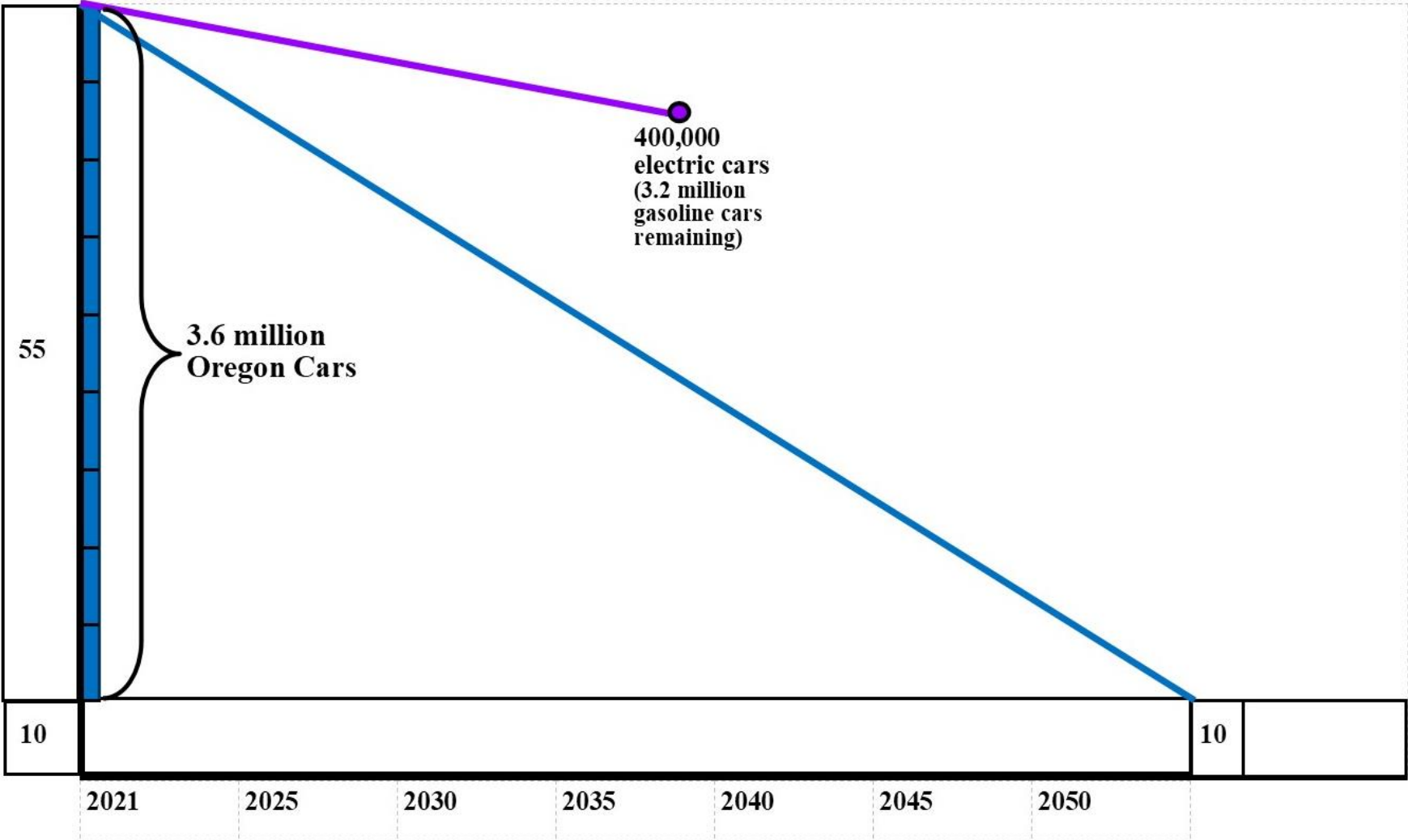


Chart 1.1

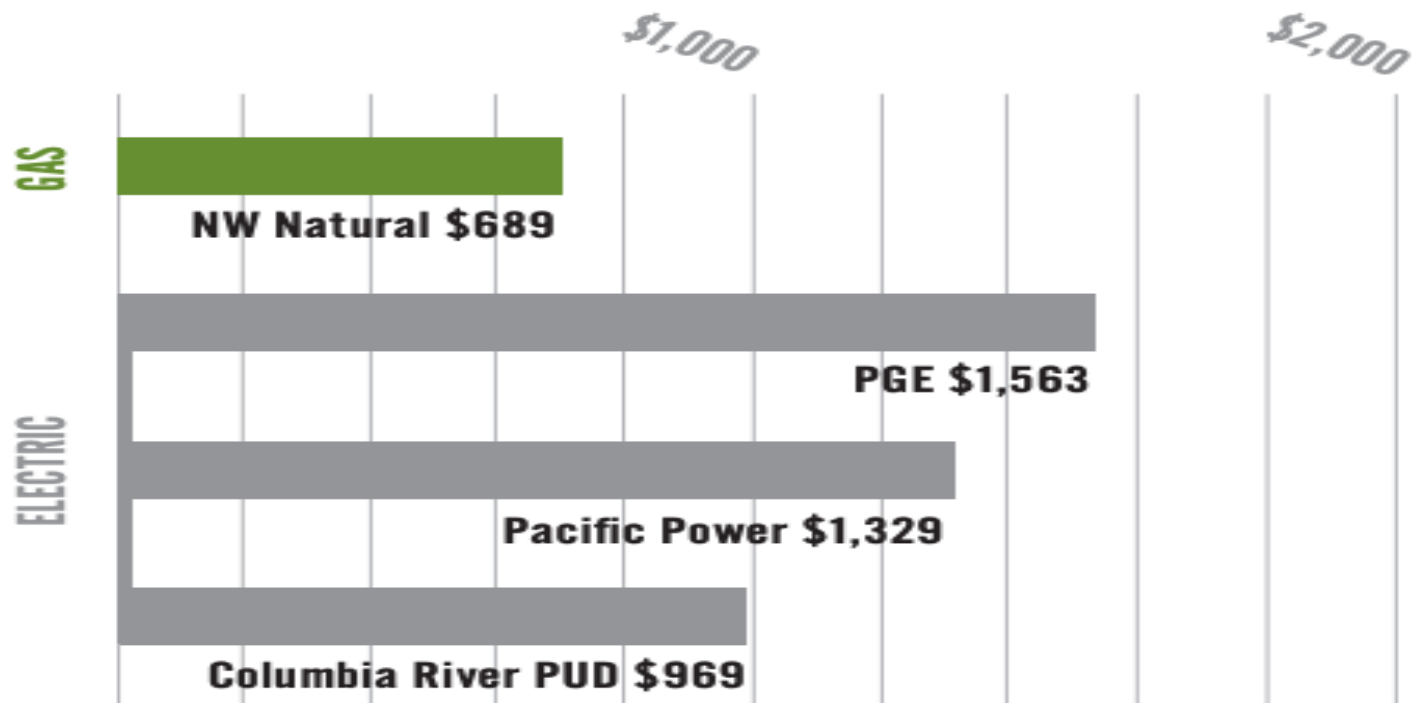
Slide prepared by Senator Bentz's office—calculations & estimates should be verified before being quoted.

TOTAL HOUSEHOLDS IN OREGON USING THE FOLLOWING AS A PRIMARY SOURCE FOR HEAT:

- **Natural Gas—approx. 628,000**
- **Oil/Wood—approx. 157,000**

SOURCE: U.S. Energy Information
<https://www.eia.gov/state/analysis.php?sid=OR>

A COMPARISON BETWEEN GAS AND ELECTRIC HEATING COSTS*:

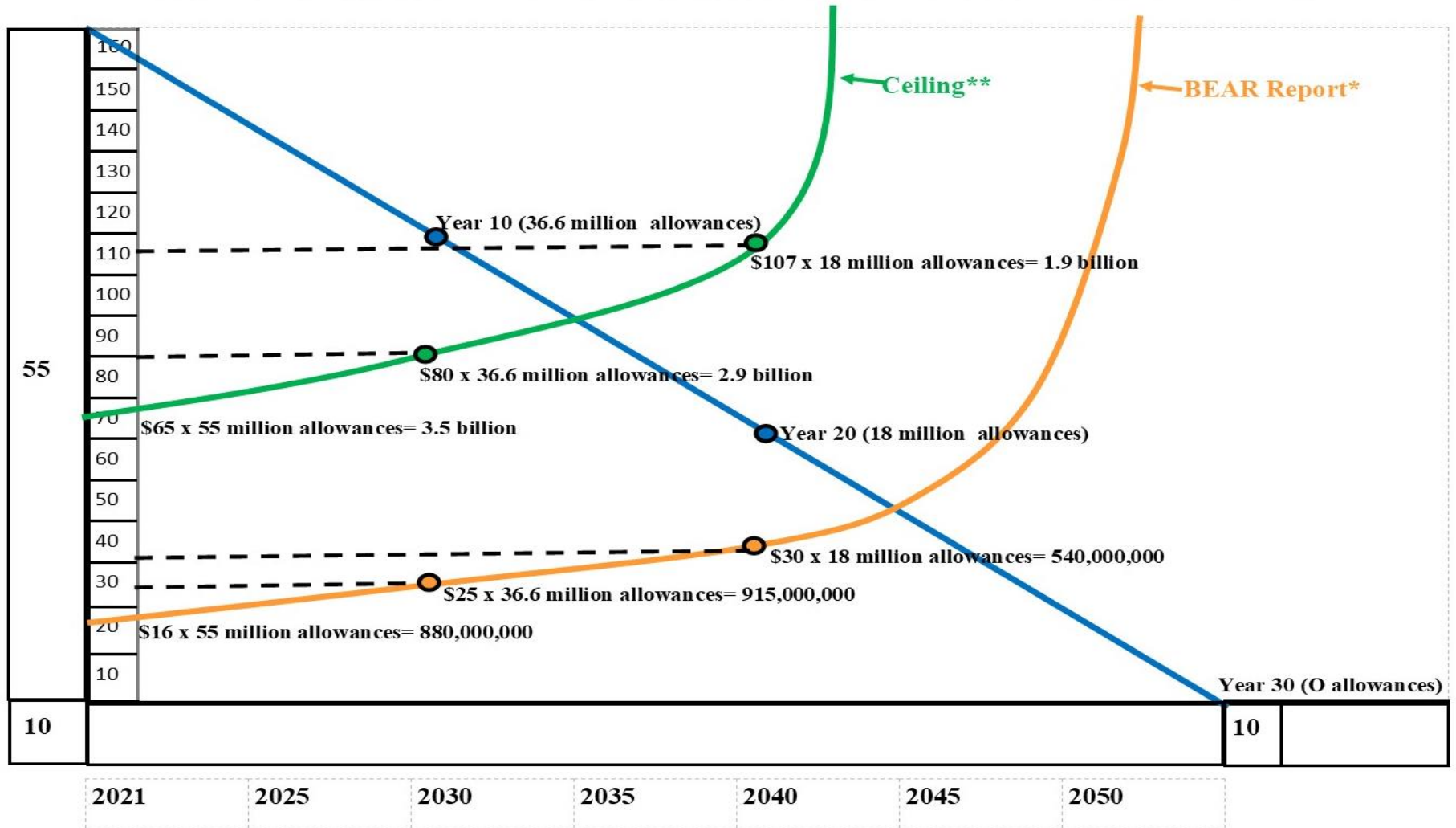


* residential rates

$\$1,329 - \$689 = \$640$ (average increase in monthly residential heating costs when switching from natural gas to electric)

SOURCE: NW Natural Gas

AMOUNTS AVAILABLE TO THE STATE AT DIFFERENT PRICES PER METRIC TON



*BEAR report is the Berkeley Economic Advising & Research Carbon Policy Economic Modeling: Inception Report

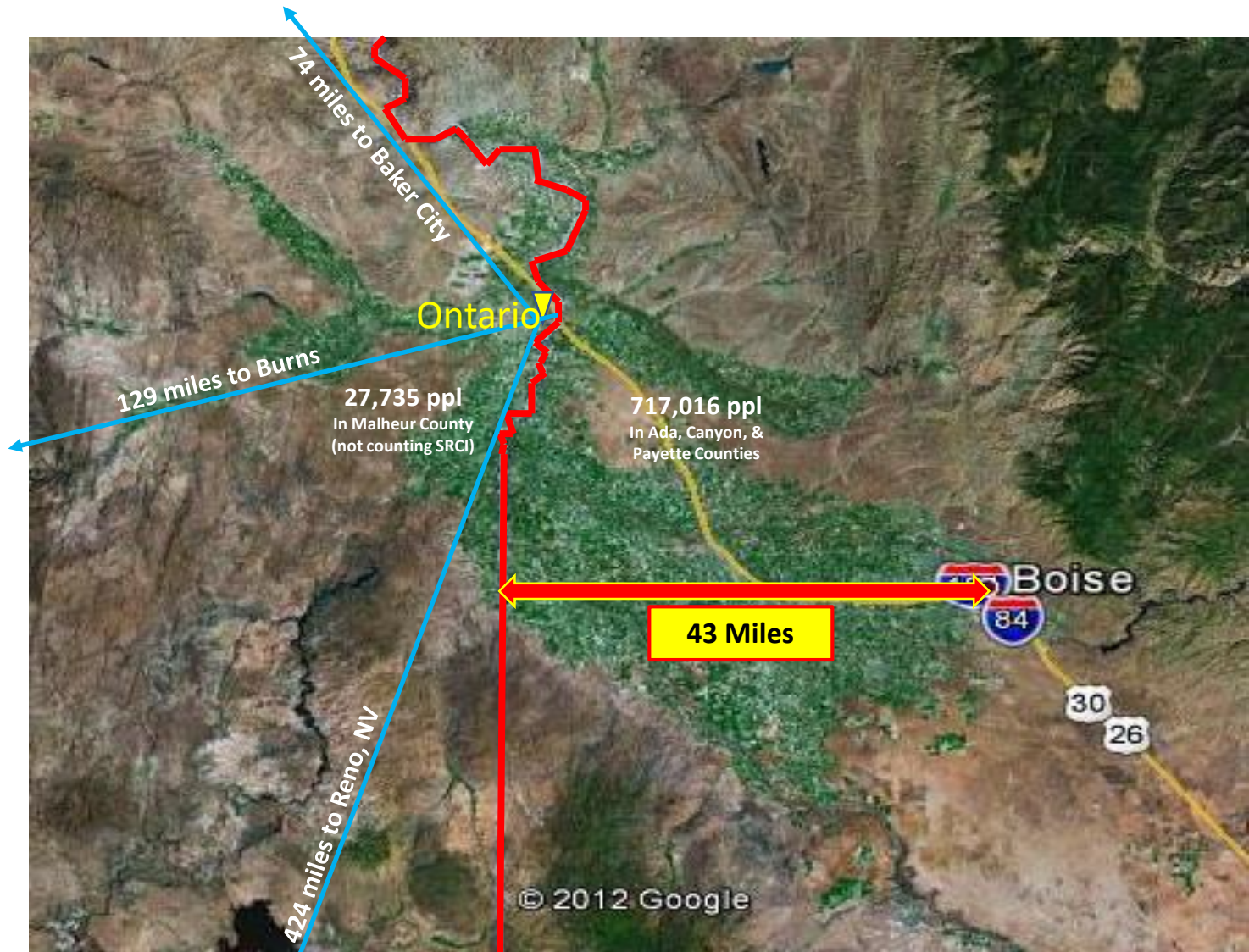
**Ceiling refers to the price ceiling for allowances bought and sold on the market

-86

PROTECT HWY TRUST
FUND/DEDICATE CO2
REVENUE TO TRANSITION

-32

EASTERN EDGE



Slide prepared by Senator Bentz's office—calculations & estimates should be verified before being quoted.

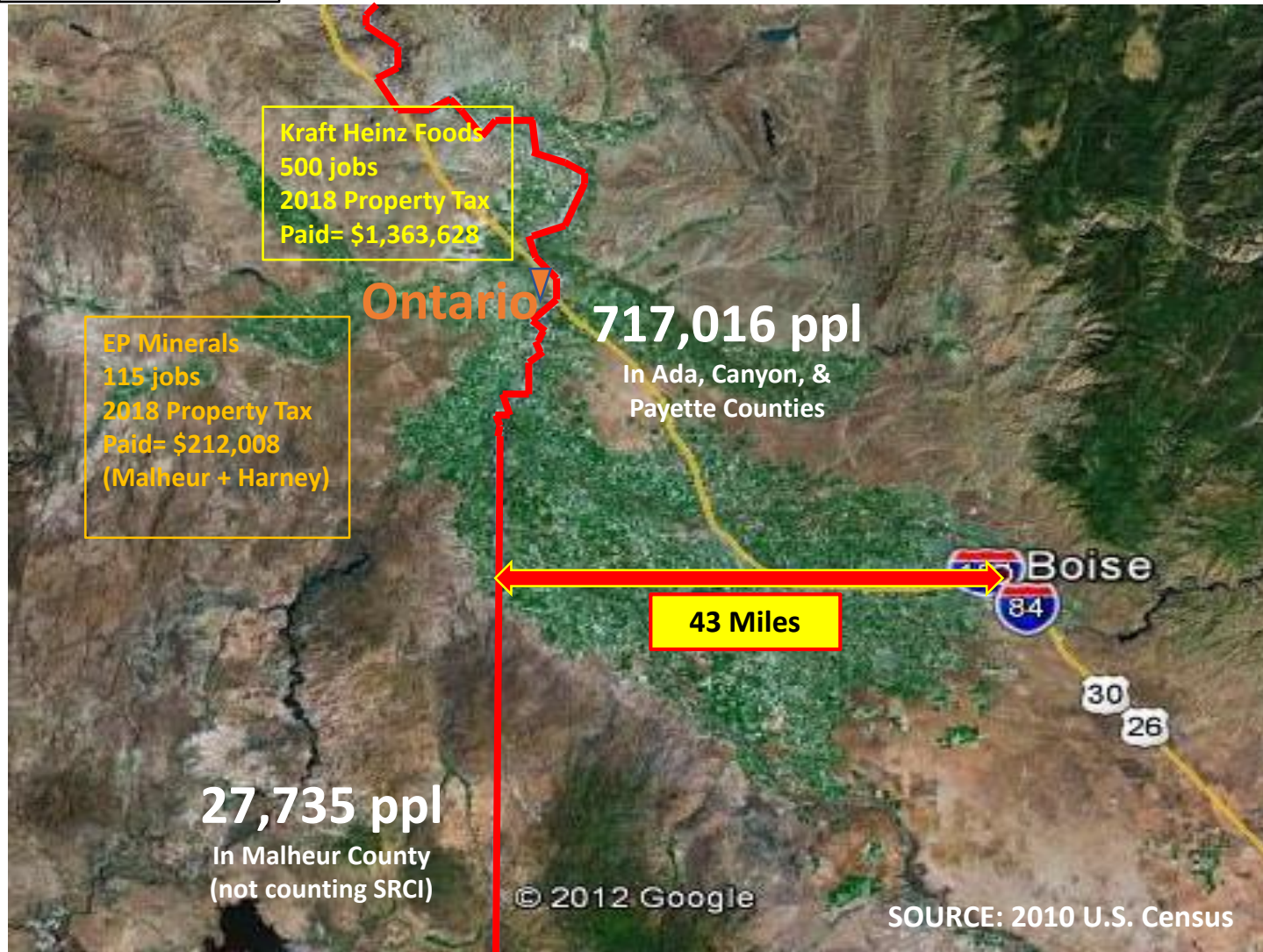
-33

PRIORITIZE SPENDING
OF AUCTION PROCEEDS
ON ELITES

Ash Grove Cement
116 jobs
2018 Property Tax
Paid= \$738,791

EITE ENTITIES IN SENATE DISTRICT 30

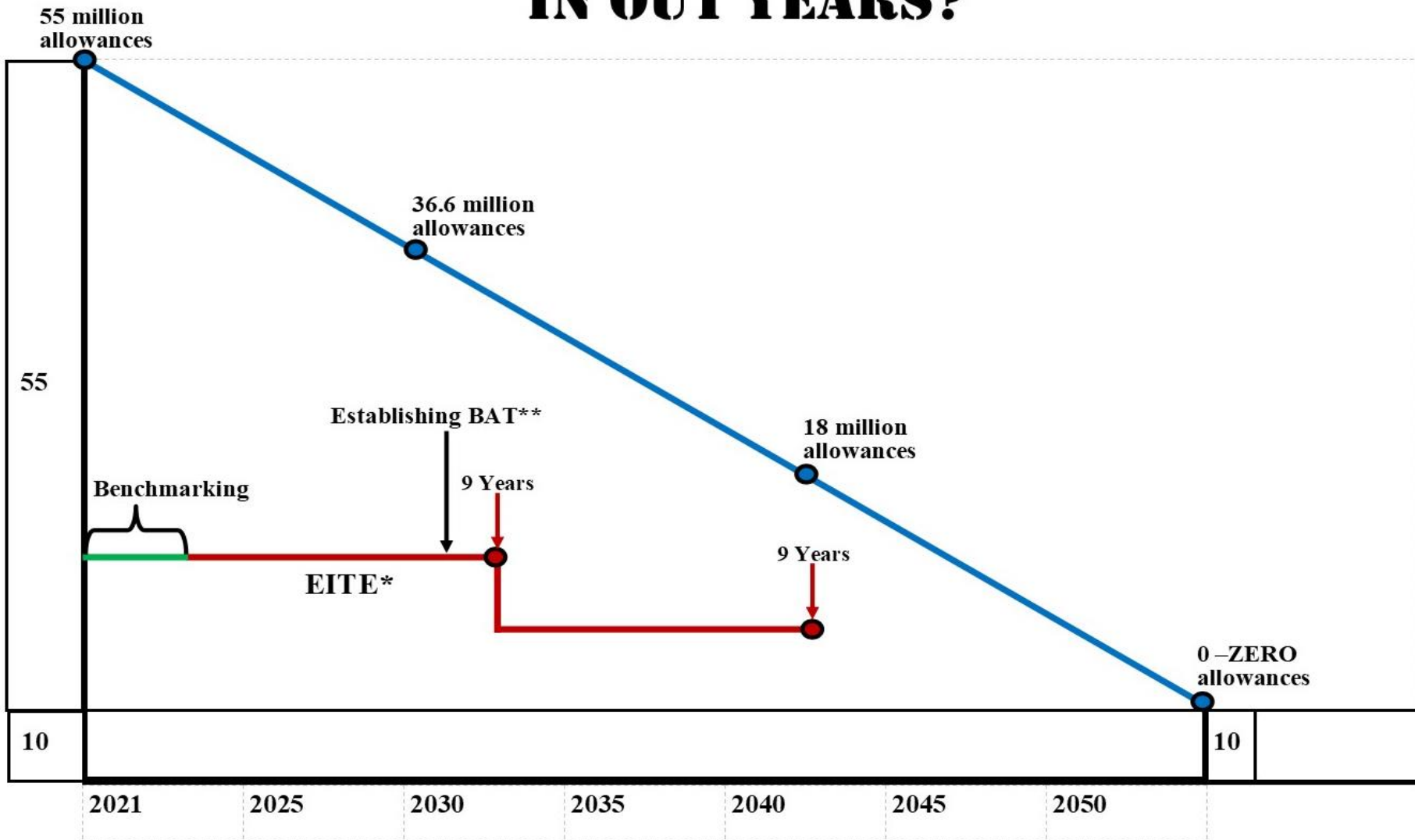
(IDENTIFIED BY OREGON CLIMATE ACTION PROGRAM AS "POTENTIALLY EITE", DEC. 2018)



https://www.oregon.gov/gov/Documents/PotentiallyRegulatedEntities_OCAP.pdf

Slide prepared by Senator Bentz's office—calculations & estimates should be verified before being quoted.

WHERE WILL THE ALLOWANCES COME FROM IN OUT YEARS?



*EITE means Emissions Intensive, Trade Exposed entities

**BAT means Best Available Technology

ALTERNATIVES TO DECLINING CAP

STEEPER BEGINNING

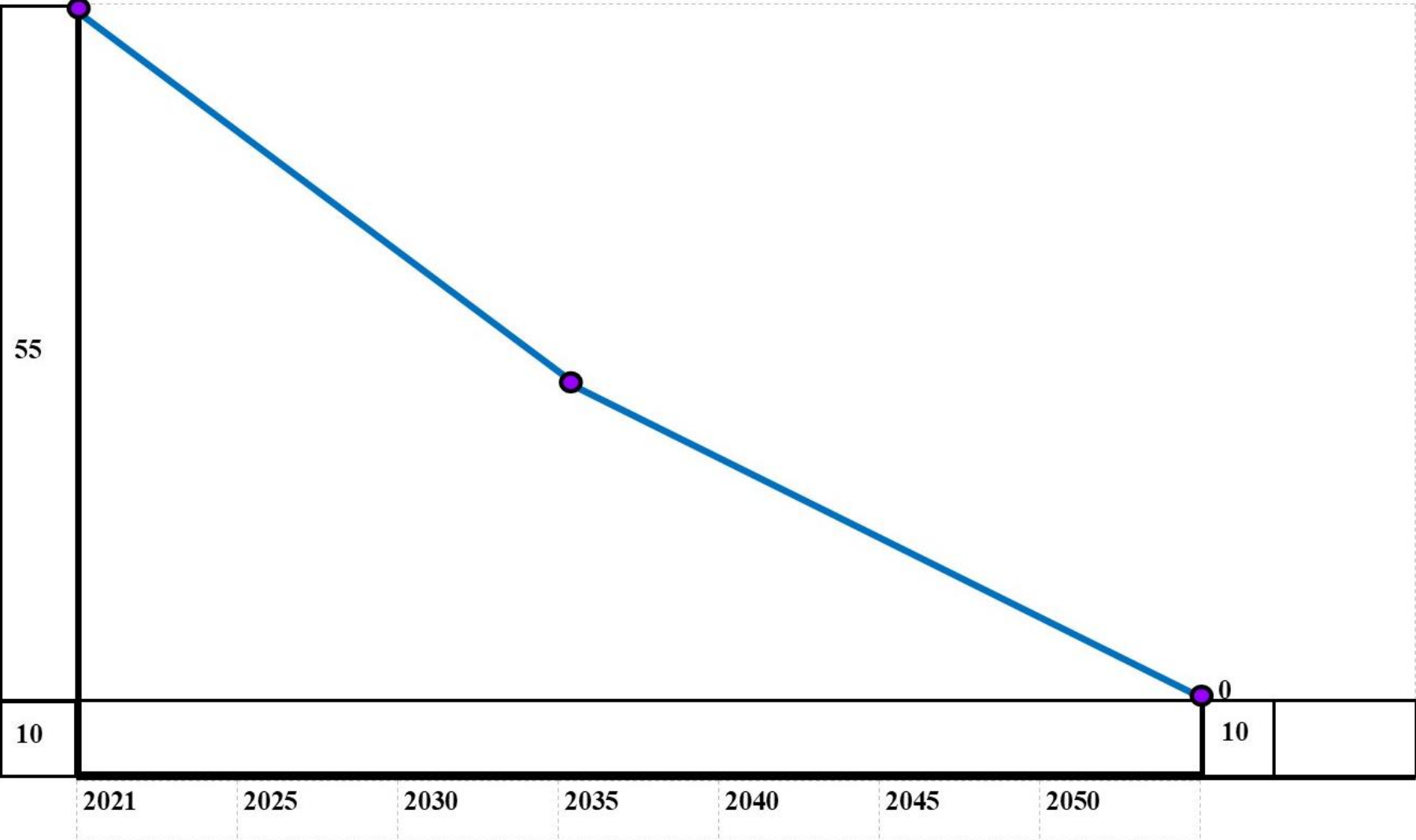
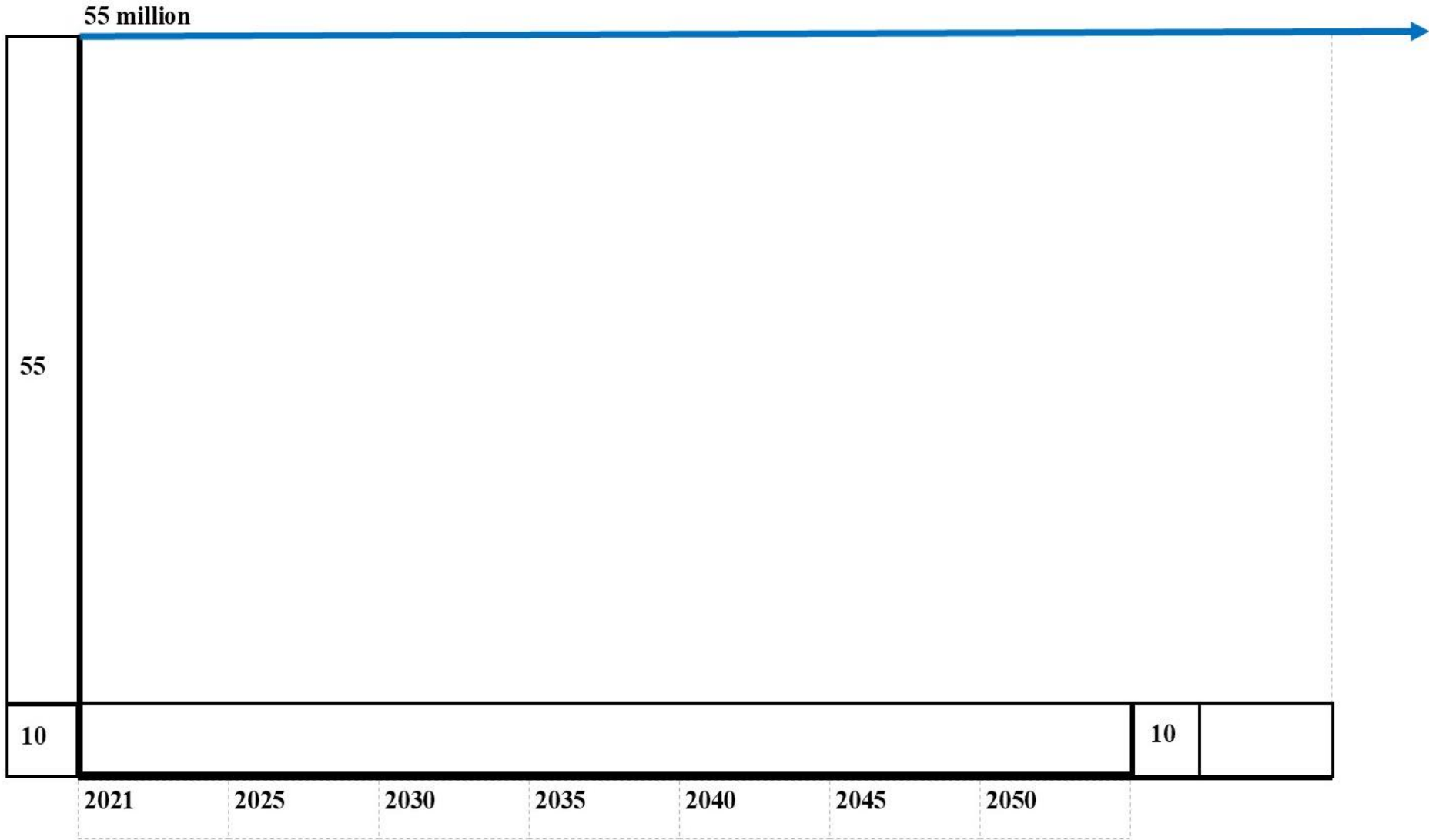


Chart 7

Slide prepared by Senator Bentz's office—calculations & estimates should be verified before being quoted.

FLAT CAP



DISCONTINUANCE OF DECLINING CAP

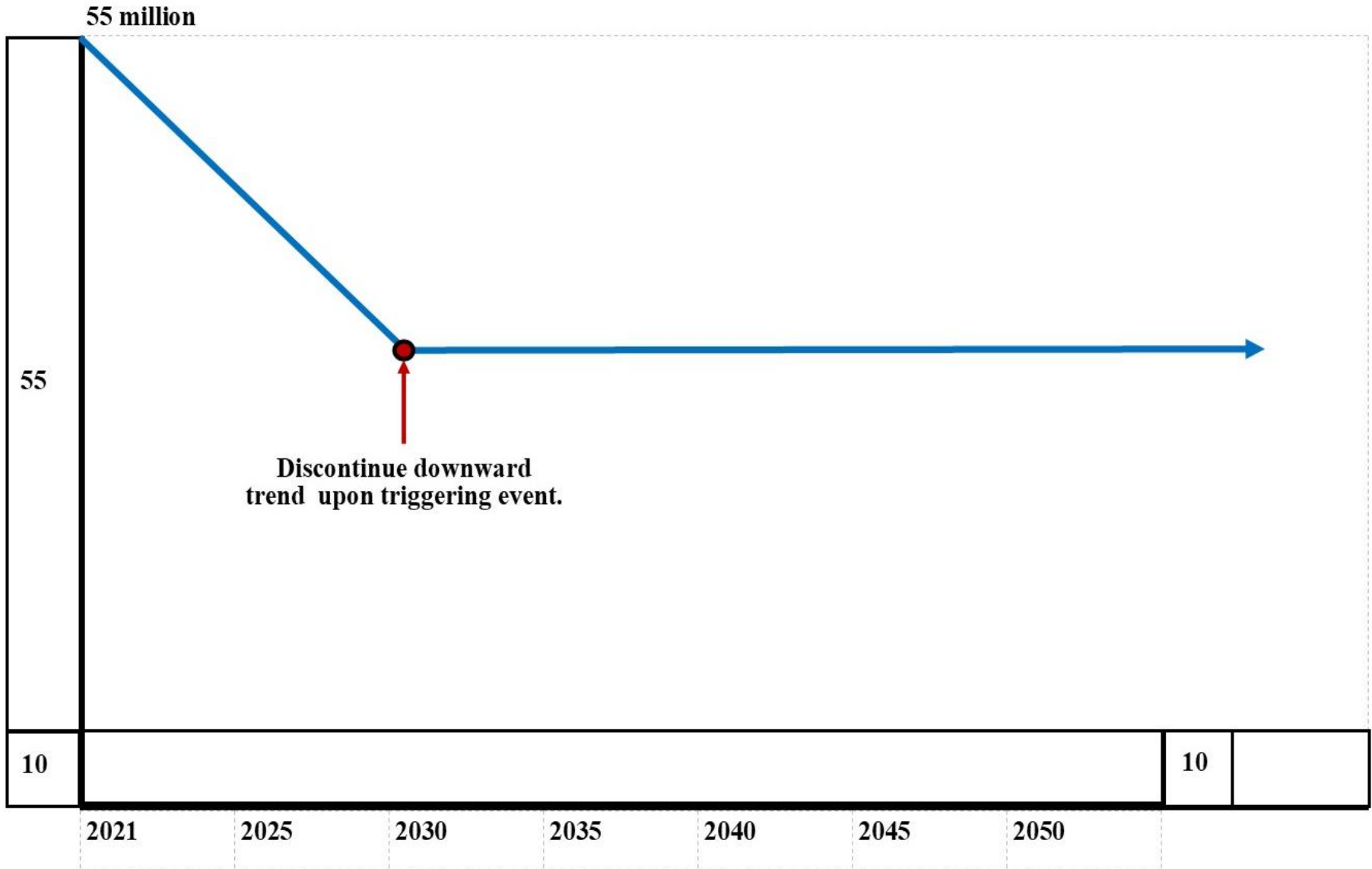


Chart 9

OFF-SETS

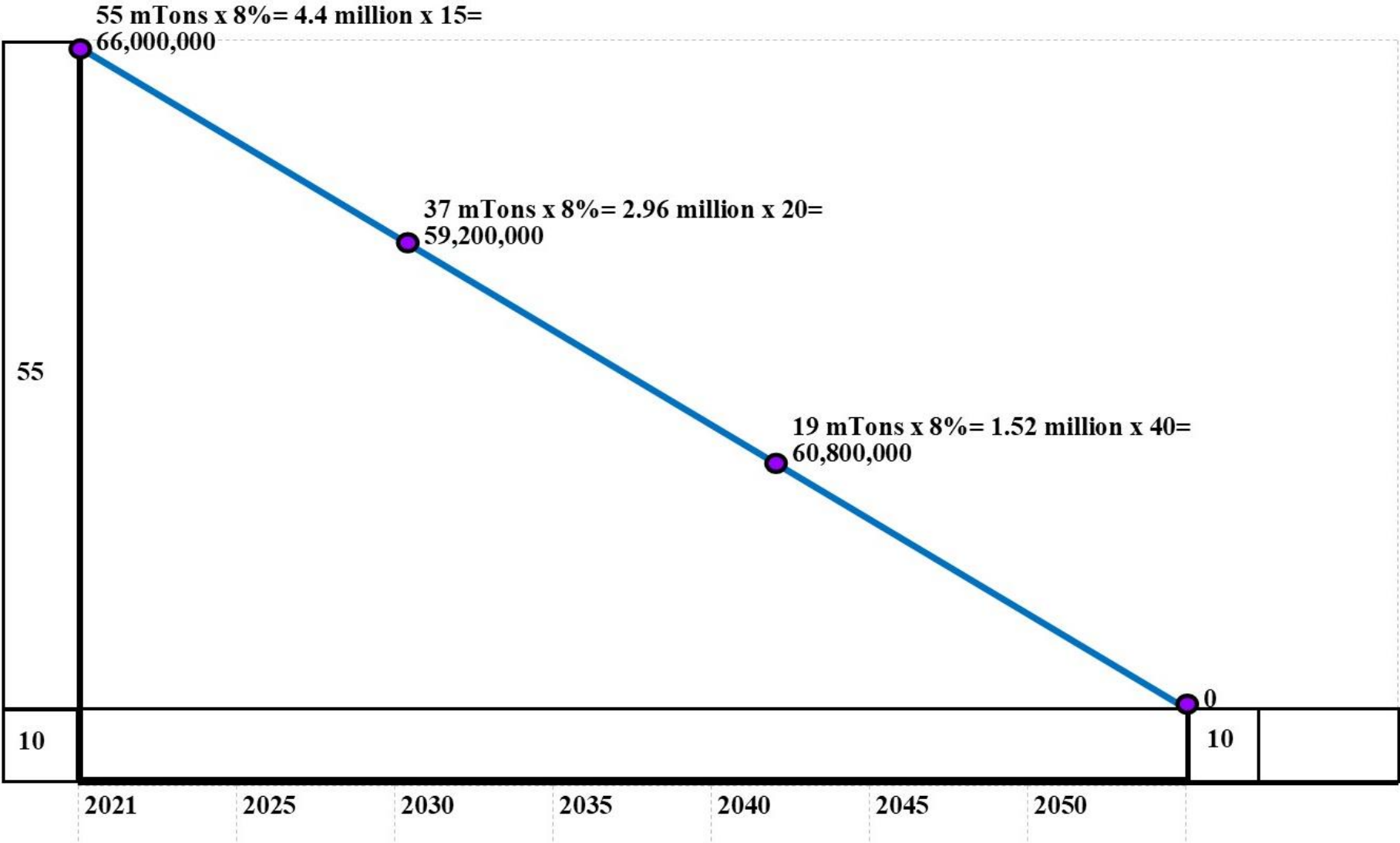


Chart 3

Slide prepared by Senator Bentz's office—calculations & estimates should be verified before being quoted.