

Public Health & Climate Change



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May 2010

Climate Change:

- Temperature rise
- Sea level rise
- Hydrologic extremes

HEAT

→ Heat stress, cardiovascular failure

SEVERE WEATHER

→ Injuries, fatalities

AIR POLLUTION

→ Asthma, cardiovascular disease

ALLERGIES

→ Respiratory allergies, poison ivy

VECTOR-BORNE DISEASES

→ Malaria, dengue, encephalitis, hantavirus, Rift Valley fever

WATER-BORNE DISEASES

→ Cholera, cryptosporidiosis, campylobacter, leptospirosis

WATER AND FOOD SUPPLY

→ Malnutrition, diarrhea, harmful algal blooms

MENTAL HEALTH

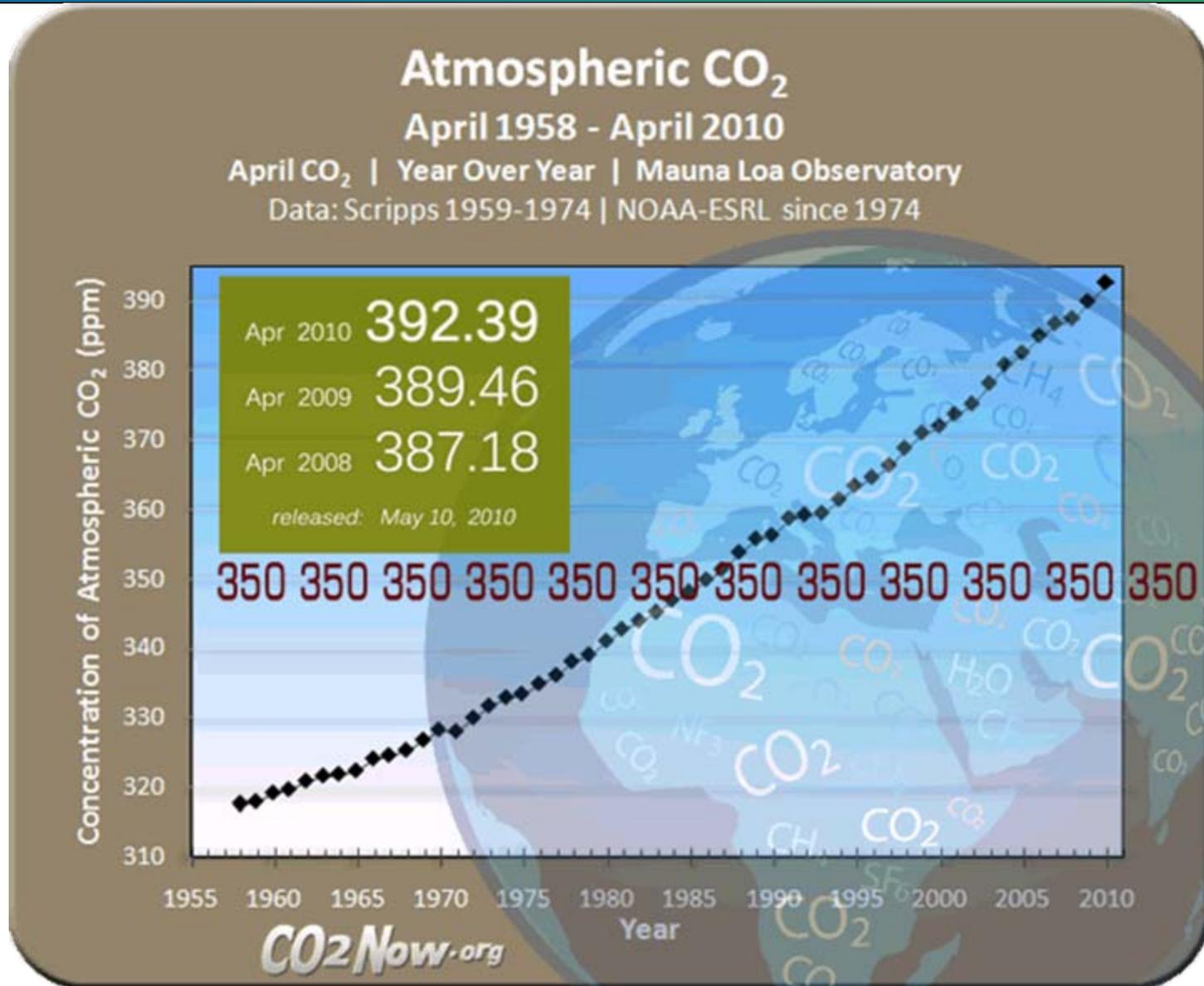
→ Anxiety, despair, depression, post-traumatic stress

ENVIRONMENTAL REFUGEES

→ Forced migration, civil conflict

Adapted from J. Patz

Why is 350 the most important number?



The Copenhagen Diagnosis

- Surging greenhouse gas emissions
- Recent global temperatures demonstrate human-based warming
- Acceleration of melting of ice-sheets, glaciers and ice-caps
- Rapid Arctic sea-ice decline
- Current sea-level rise underestimates
- Sea-level prediction revised
- Delay in action risks irreversible damage
- The turning point must come soon

We can't afford to watch and wait

“This is not a “black swan” [an event beyond normal expectation]... This is not a small probability of a rather unattractive outcome. This is a big probability of a very bad outcome.”

N Stern Copenhagen 2009

The Climate Gap

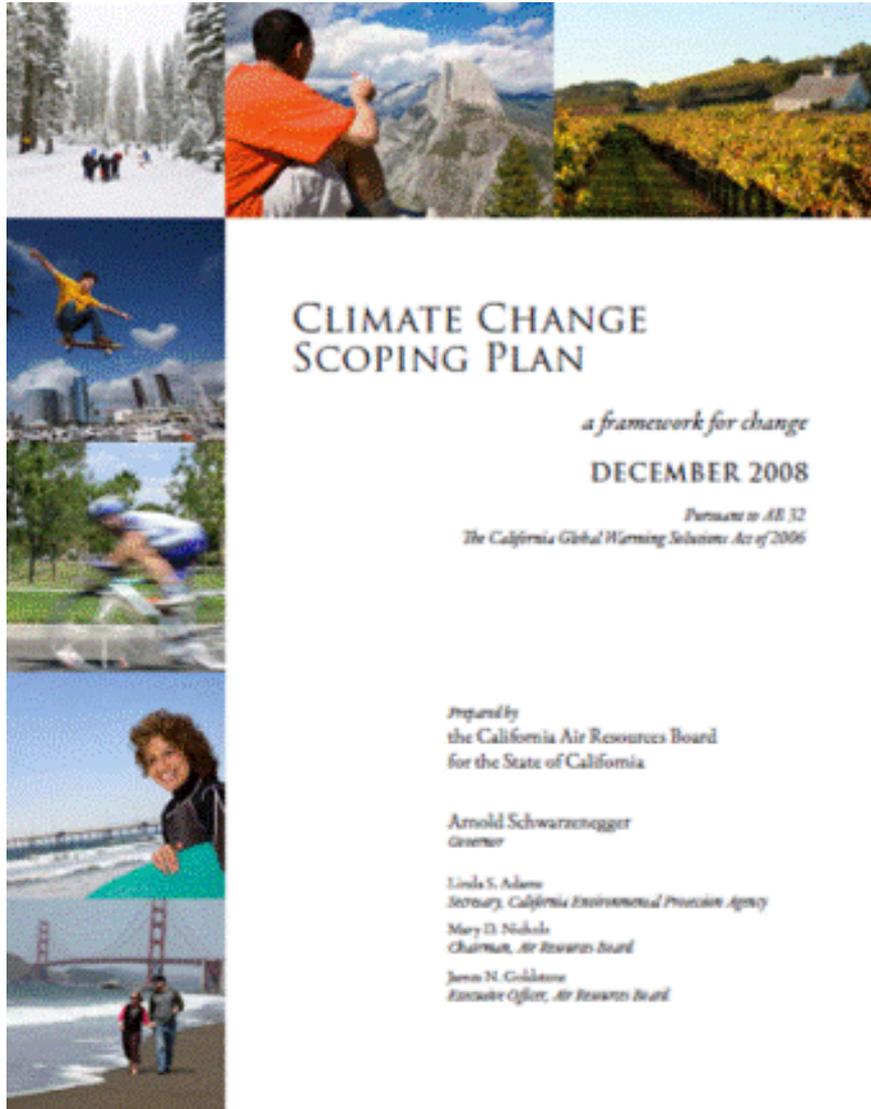


**It's the
eco₂nomy,
stupid.**

We can do something about this



We can do something about it



We can do something about it



Why is VMT a health indicator?

- **Safety** – reduced auto injuries
- **Active transportation** – increased PA
- Improve air quality – **reduce asthma/CVD**
- Decrease commute - increase **social/civic** time
- Purchase power (**food, health care**) with lower transportation costs
- **Access** to essential goods & services
- Increase **Social connections**



- **Active transport plus low-emission vehicles** →
 - Decrease transport CO2 60% below 1990 levels
 - Reduce heart disease & stroke 10%
 - Reduce breast cancer 12%
 - Reduce dementia 7%, depression 4%

(Woodcock, 2009 Lancet)

Small Actions = Big Impacts



= 10 lb. CO₂



= 1 lb. CO₂

- Livestock production = about 20% total GHG emissions (methane)
- 30% reduced consumption saturated fat from animal sources →
15% reduction heart disease (Friel, 2009 Lancet)

Public Health Climate Action

- Communicate
- Climate Action Team Public Health Work Group
- SB375 and Strategic Growth Council
- Health in All Policies Task Force

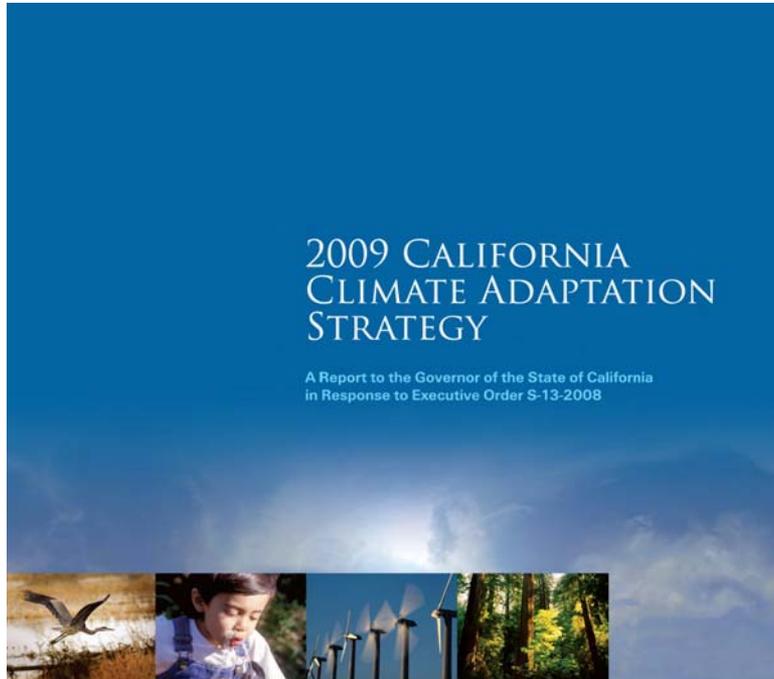
- **What are you doing?**
- **What are CBOs in your communities doing?**

CAT Public Health Work Group Work Plan

- Promote Mitigation and Adaptation Strategies with Public Health Co-Benefits
 - Guidelines for HIA
 - HIA training
 - Cap and Trade HIA
 - HIA of other mitigation and adaptation measures
 - **Your suggestions?**

- Outreach, training, and technical assistance
 - **What would be most helpful?**

We can do something about it



CAT Public Health Work Group Work Plan

- Promote community resilience to reduce vulnerability to climate change
 - Urban heat island mitigation
 - Social support (e.g. heat buddy systems)
 - Reduce health inequities
 - **Your suggestions?**

- Improve public health preparedness and emergency response
 - Develop model adaptation plan for heat*
 - Map heat vulnerability locally (e.g. temperature, tree cover)
 - Identify vulnerable populations
 - Heat illness surveillance
 - Heat warning systems
 - **Your suggestions?**

* CDC-funding dependent

CAT Public Health Work Group Work Plan

- Surveillance and data collection
 - Climate health indicators (CSTE)
 - Heat illness, vector born disease surveillance
 - Healthy Communities indicators
- Vulnerability Assessment
 - Down-scale health risks (e.g. heat, forest fire)
 - Identify vulnerable communities
- Research

SB 375 & Strategic Growth Council

■ SB 375

- Sustainable Communities Strategies grants
- Urban Greening grants
- Larry Frank workshops
 - June 7 Fresno
 - June 8 Oakland
 - June 16 Los Angeles

Health in All Policies Task Force

- GAS Executive Order S-04-10

<http://images.emaildirect.com/clients/govpressoffic/e847/S0410HealthinAllPoliciesHiAPTtaskForce.pdf>

- What is a healthy & sustainable community?

- Every California resident can walk, bike, or take public transit to school, work, and other essential destinations

- Every Californian has access to affordable healthy food at school, work, and in their neighborhood

Climate Action Plans



GREEN LA

An Action Plan to Lead the Nation
In Fighting Global Warming



GREEN CITY ACTION PLAN

Pasadena



Redwood City Community
Climate Action Plan



Community action on climate change

OCAC
Oakland Climate Action Coalition

free event · free food · live performance

COMMUNITY CONVERGENCE FOR CLIMATE ACTION

Wednesday, November 18, 2009 | 6:00-8:00pm
Laney College Theater | 900 Fallon St. at 9th St., Oakland



The collage features four distinct scenes: 1) A group of colorful bicycles parked on a city street. 2) A group of people, some holding shovels, standing in an urban setting, likely engaged in a community garden project. 3) A group of people in orange shirts and hard hats standing in front of a bus, representing alternative transportation. 4) A group of people, including a woman holding a baby, representing green-collar job training and community support.

Safe Streets for Bikes -
Improve Our Health

Urban Agriculture & Forestry -
Clean Our Air

Alternative Transportation -
Saves Us Money

Green-Collar Job Training -
Create Green Jobs

10:10:10

350.org

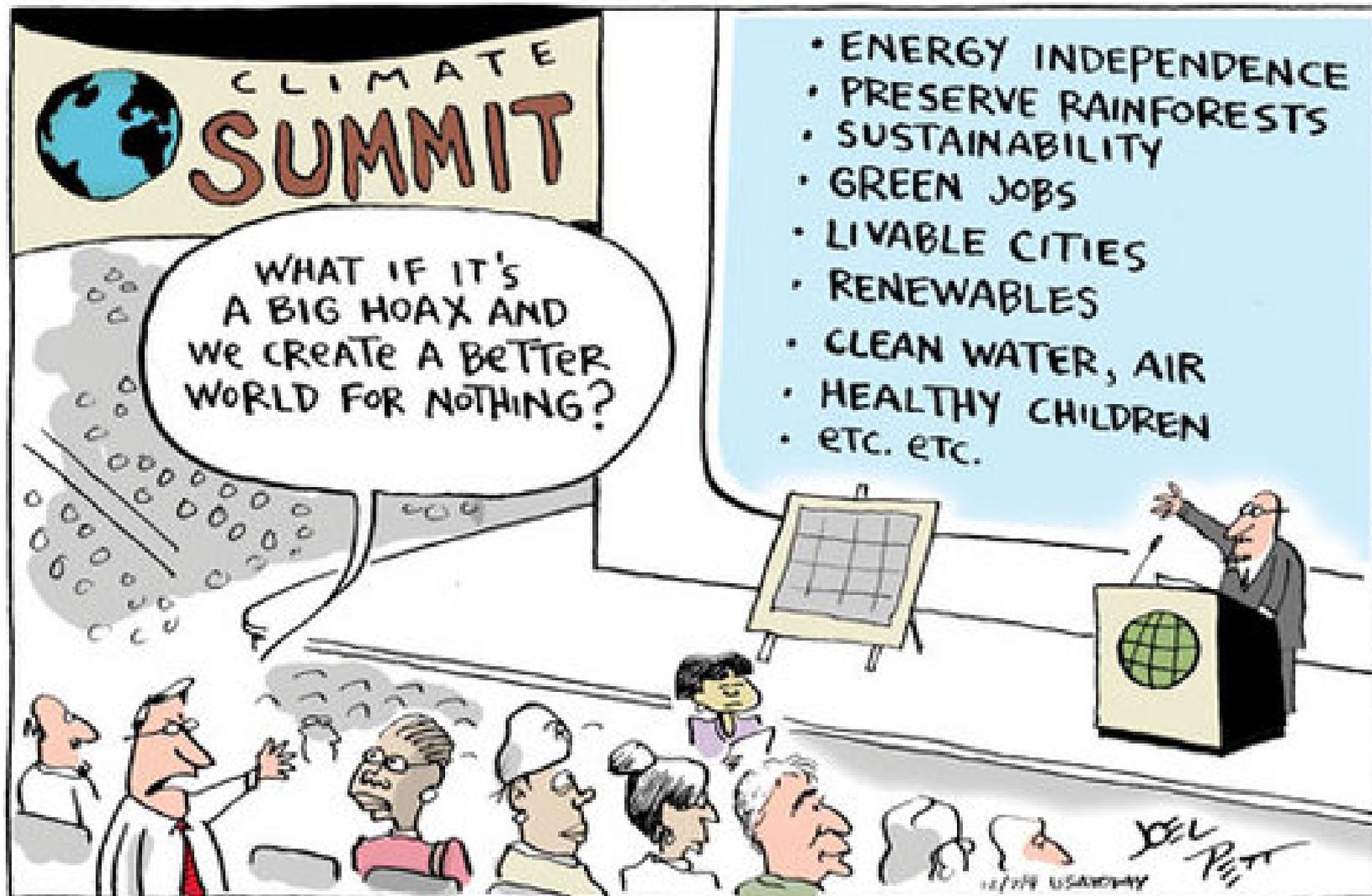


Oil companies are trying to roll back AB32



California Jobs Initiative

GetCaliforniaBacktoWork.com



What were they thinking?



If we act urgently and aggressively we can

- Prevent the most catastrophic climate scenarios
- Promote climate mitigation and adaptation strategies with health co-benefits
- Reduce health inequities and chronic illness
- Build resilient communities to adapt better
- Promote healthy, equitable, and sustainable communities

What kind of ancestors will we be?

