

DESCENDING THE OIL PEAK: NAVIGATING THE TRANSITION FROM OIL



Portland Peak Oil Task Force Report

Presented by:
John Kaufmann
Oregon Dept. of Energy

Portland Peak Oil Task Force

- Requested by Portland Peak Oil
- Approved by City Council
- Request for volunteers
- 12 members selected



Task Force Make-up

- Former director state Economic Dev. Dept.
- Former director state Land Use Dept.
- Architect/planner
- Energy analyst
- Farmer
- Portland Peak Oil (advocacy group)
- Oregon Environmental Council
- Public health social worker
- Sociologist
- Physicians Social Responsibility
- Public relations
- Retiree

Task Force Process

- Subcommittees met weekly for 10 weeks
- Task Force met bi-weekly
- Impacts first, then recommendations
- Interviews
- Electronic bulletin board (articles), blog

Task Force Process: Four Subgroups

**Land Use /
Transportation**

Economy

Public Services

Health care

Schools

Utilities

City services

Food & Agriculture

Ground Rules

- No debate about “if” or “when”
 - ↳ Peak will happen
 - ↳ ... probably sooner rather than later
- Long emergency, not sudden shock
- No “magic bullet” supply alternatives



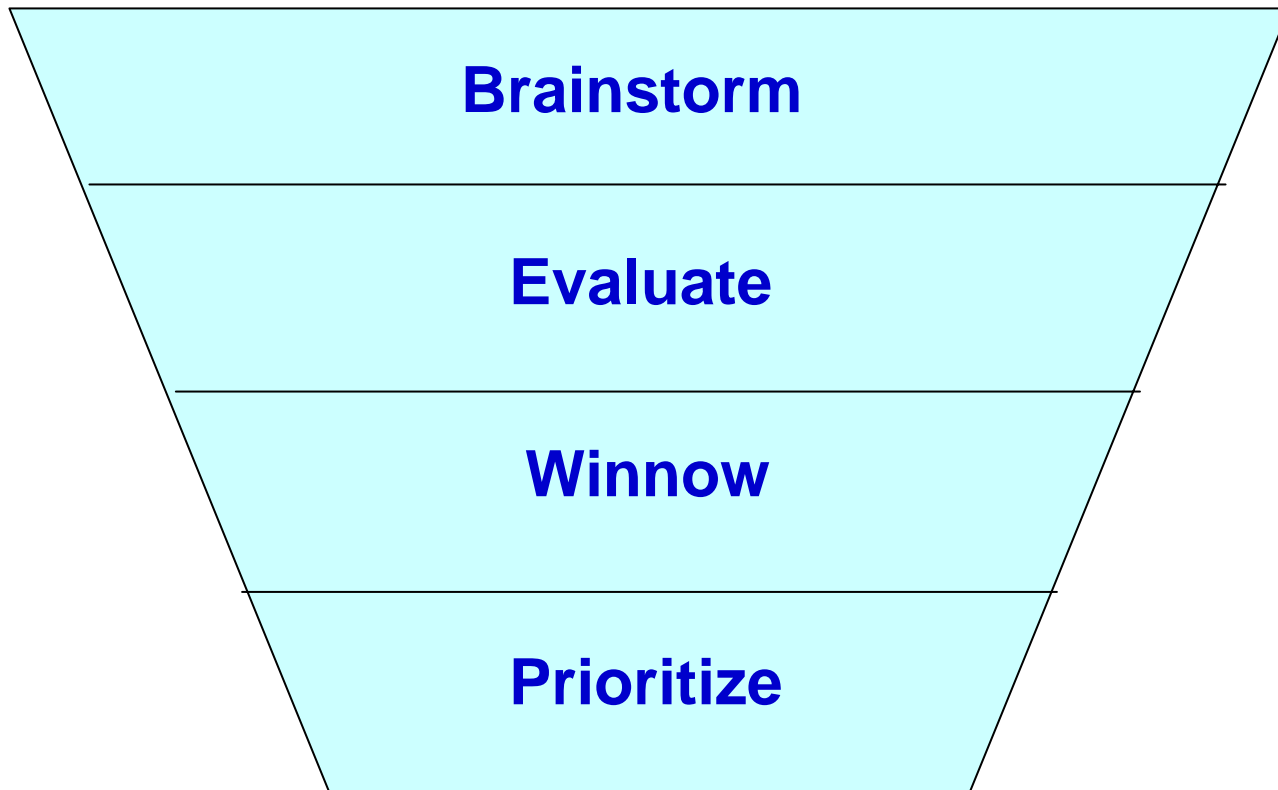
Ground Rules

- Impacts first
... then Recommendations
- Impacts for entire Metro area;
Recommendations for City only
- Focus on the big stuff ... don't spiral down

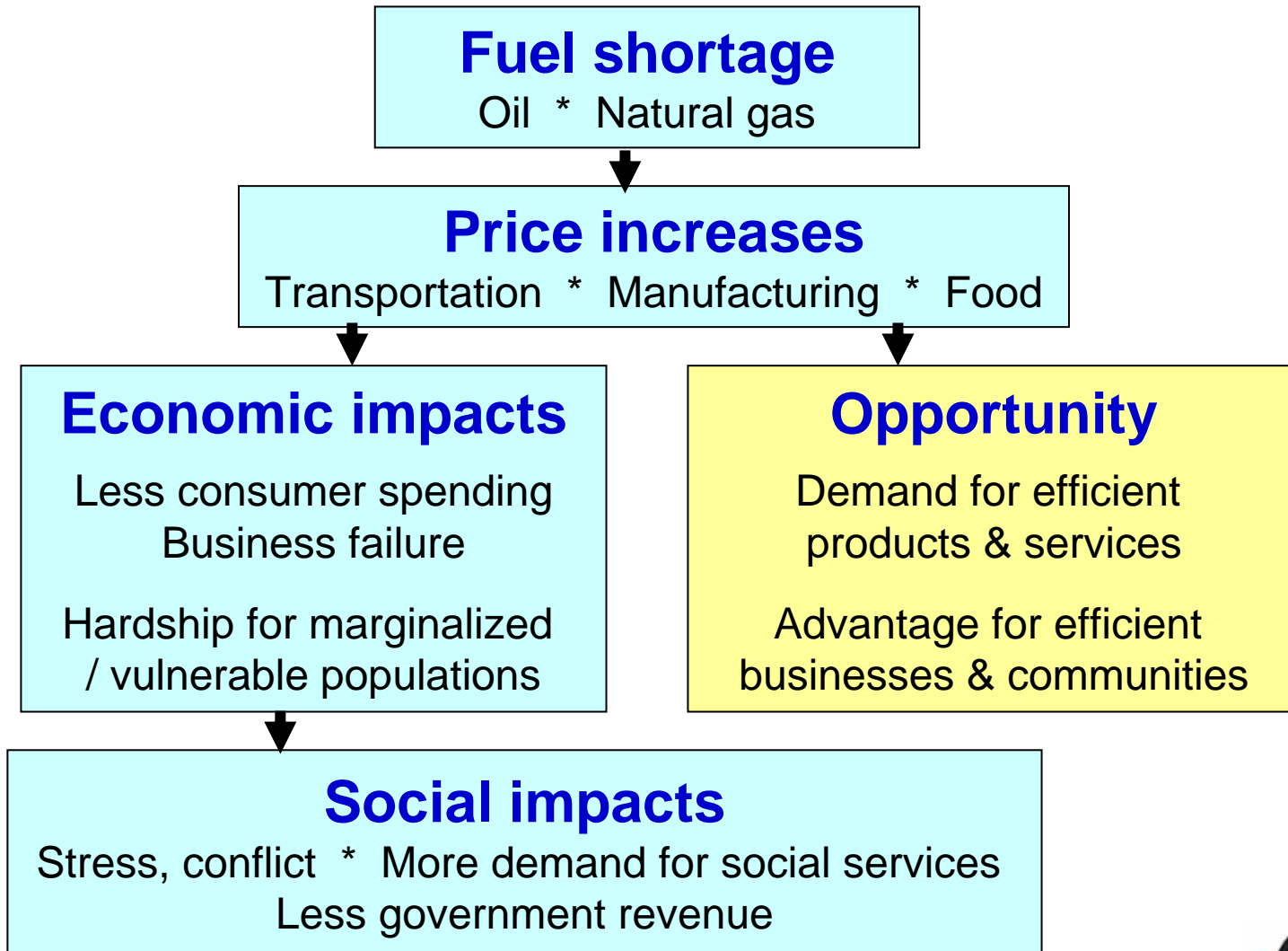
Scenarios

		SEVERITY OF IMPACTS	
		LESS SEVERE	MORE SEVERE
SPEED OF IMPACTS	GRADUAL SLIDE	Long-Term Transition Planning, policies, programs Focus of Task Force efforts	Disintegration Limited ability to respond. Task Force recommendations are meant to help avoid this scenario.
	RAPID SUDDEN SHOCKS	Oil Shocks Emergency Management Plan	

Process Used to Determine Impacts and Recommendations



Impact Pathways



Key Questions

Transportation & Land Use

- How will freight move?
- How will people get to work (and other places)?
- How will land use be affected by peak oil, and how can it help?

Key Impacts

Transportation & Land Use

- Demand for transport alternatives
- People/businesses relocate
- Pressure for density, mixed use
- Freight costs up, shift mode
- Air travel declines
- Road maintenance more costly, difficult



Key Questions

Food & Agriculture

- How will food availability, prices, quality (nutrition) and choices be affected?
- How will food production, processing, transportation, and distribution be affected?



Key Impacts

Food & Agriculture

- Amount, variety of food decreases
- Higher prices: food costs more to produce, process, transport
- Diet and nutrition, esp. for low-income
- Shifts in food retailing
- More household food production, preservation
- Less waste, packaging



Key Questions

Economy – Business & Jobs

- How will production costs be affected?
- How will demand be affected?
 - ↳ Is it critical, or discretionary?
 - ↳ Are there reasonable substitutes?
- How will upstream suppliers be affected?

Key Impacts

Economy – Business & Jobs

- Unemployment, inflation, recession
- More systemic
- More persistent
- Not prone to conventional economic solutions



Key Impacts

Economy – Business & Jobs

- Higher production, distribution costs
- Upstream supply
- Consumer demand
- Business failures, unemployment
- More production for local use



Key Impacts

Economy – Traded Sector

- High-tech
- Transportation equipment
- Apparel manufacturers
- Special metal products
- Nursery products
- Construction
- Service sector, retail, health care

Key Questions

Public & Social Services

- How will demand for services be affected?
- How will ability to provide services be affected?
 - ↙ Health care
 - ↙ Public health
 - ↙ Education
 - ↙ Housing assistance
 - ↙ Food assistance
 - ↙ Police/fire
 - ↙ Water
 - ↙ Wastewater
 - ↙ Municipal solid waste
 - ↙ Electricity

Key Impacts

Public & Social Services

- Vulnerable & marginalized population hit first and hardest
- Stretches already stressed systems
- Low awareness – effects are indirect
- Demand up, revenues down
- Fractured community networks

Key Impacts

Public & Social Services

- Health care & public health
- Housing, homelessness
- Heating
- Electric supply
- Schools
- Substance abuse, domestic violence, property crimes

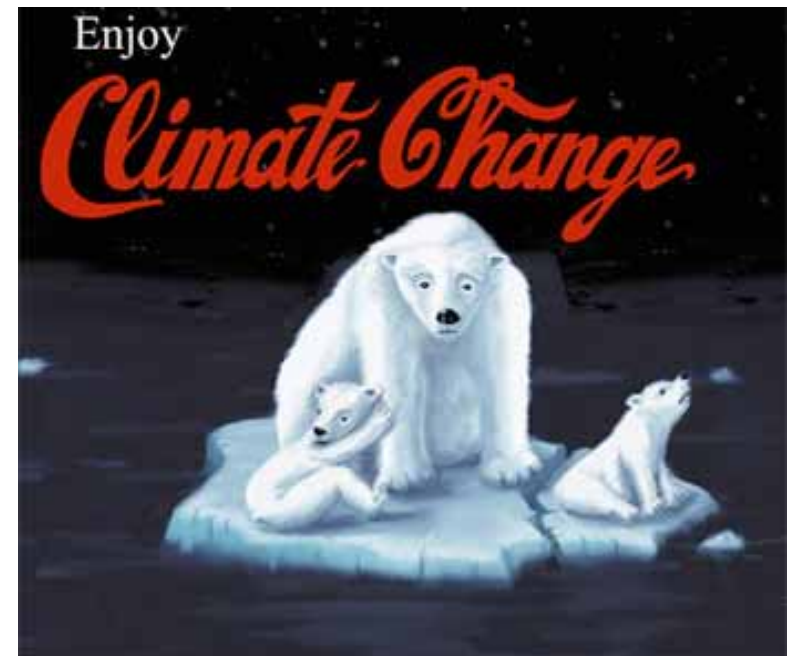


Unresolved

- Will business opportunities offset impacts?
- Will lifestyle changes be for the worse, or just different?

Unaddressed Issues

- Net energy
 - ↳ How much will renewables replace?
- Equity in global distribution of oil
 - ↳ U.S. share reduced
- Interactive effects with global warming



Recommendations

Leadership

*Community awareness
Planning*

Sustainable Economic Development

*Farm preservation
Sustainable business*

Urban Design

*Land use
Transportation infrastructure*

Social & Economic Support Systems

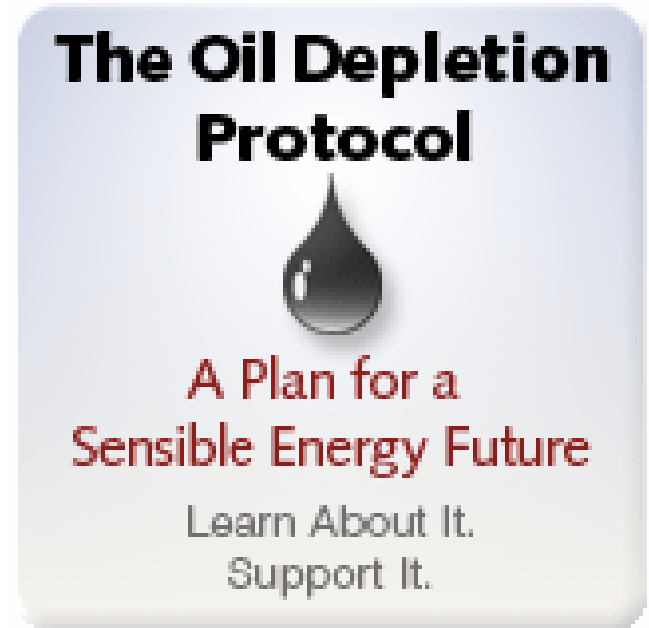
*Vulnerable & marginalized
populations*

Efficiency & Conservation Programs

Emergency Planning

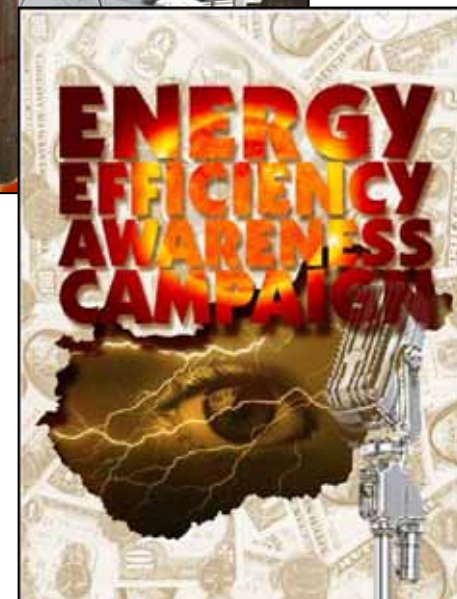
#1: Reduce Oil and Gas Use 50% in 25 years

- Consistent with Oil Depletion Protocol
- Assess progress
- Start NOW



#2: Inform Citizens

- Build awareness
- Unite people around a vision
- Mobilize creativity
- Integrate message



#3: Engage Civic Leadership

- Build awareness among decision makers and opinion leaders
- Spur government and corporate planning and preparation



#4: Land Use Patterns

Concept A
Growing out



Concept B
Growing up



Concept C
Neighboring cities



- Reduce transportation needs
- Promote walkability
- Provide easy access to services and transportation options

#5: Smart Infrastructure Investments

- Provide transportation options
- Facilitate movement of freight
- Prevent stranded infrastructure investments



#6: Encourage Efficient & Renewable Transport Choices

- Get people out of their cars
- Provide easy access to alternative modes of transportation
- Encourage use of biofuels



#7: Expand Energy Efficiency Programs

- (Dramatically) ramp up existing programs
- More and faster
- New & existing buildings
- Residential & commercial



#8: Preserve Local Food Production Capability

- Preserve nearby agricultural land
- Support local food processing industry



#8: Preserve Local Food Production Capability

- Urban gardens
- Enable direct producer-buyer connection
- Educate citizens re: food growing, preserving, nutrition



#9: Promote Sustainable Business Opportunities

- Promote EE-RE businesses
- Help businesses assess impacts of peak oil
- Identify import substitution opportunities
- Workforce re-training



#10: Preserve Safety Net, Protect Vulnerable Populations

- Sense of community
- Health care, preventive care
- Public health system
- Hunger relief
- Shelter options



#10: Preserve Safety Net, Protect Vulnerable Populations

- Transportation services
- Abuse services
- Community policing
- Unemployment / welfare / job training



#11: Emergency Planning

- Fuel allocation
- Food
- Transportation



Visit Oregon (... while there's still oil)



2007 Houston World Oil Conference

Proceedings



*Energy Action for a Healthy Economy
and a Clean Environment*

- [Conference Program](#)
- [Conference DVD](#)
- [Video Highlights](#)
- [Peak Oil Review](#)
- [ASPO-USA](#)