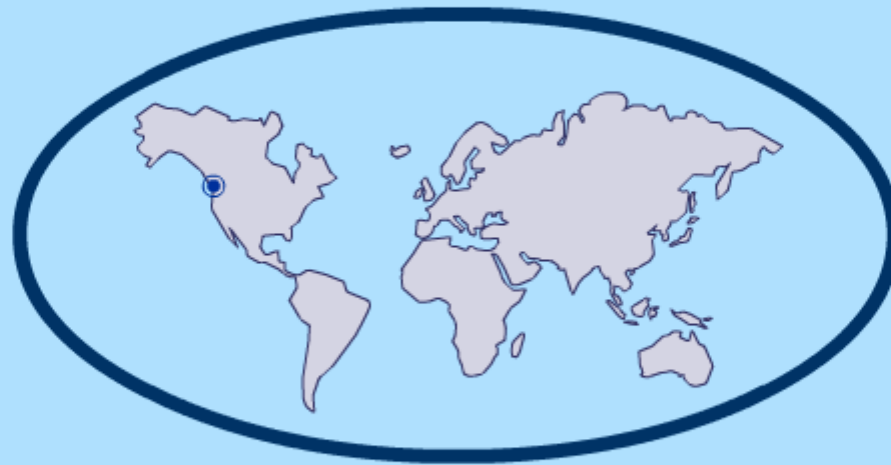


## Team Canada 1

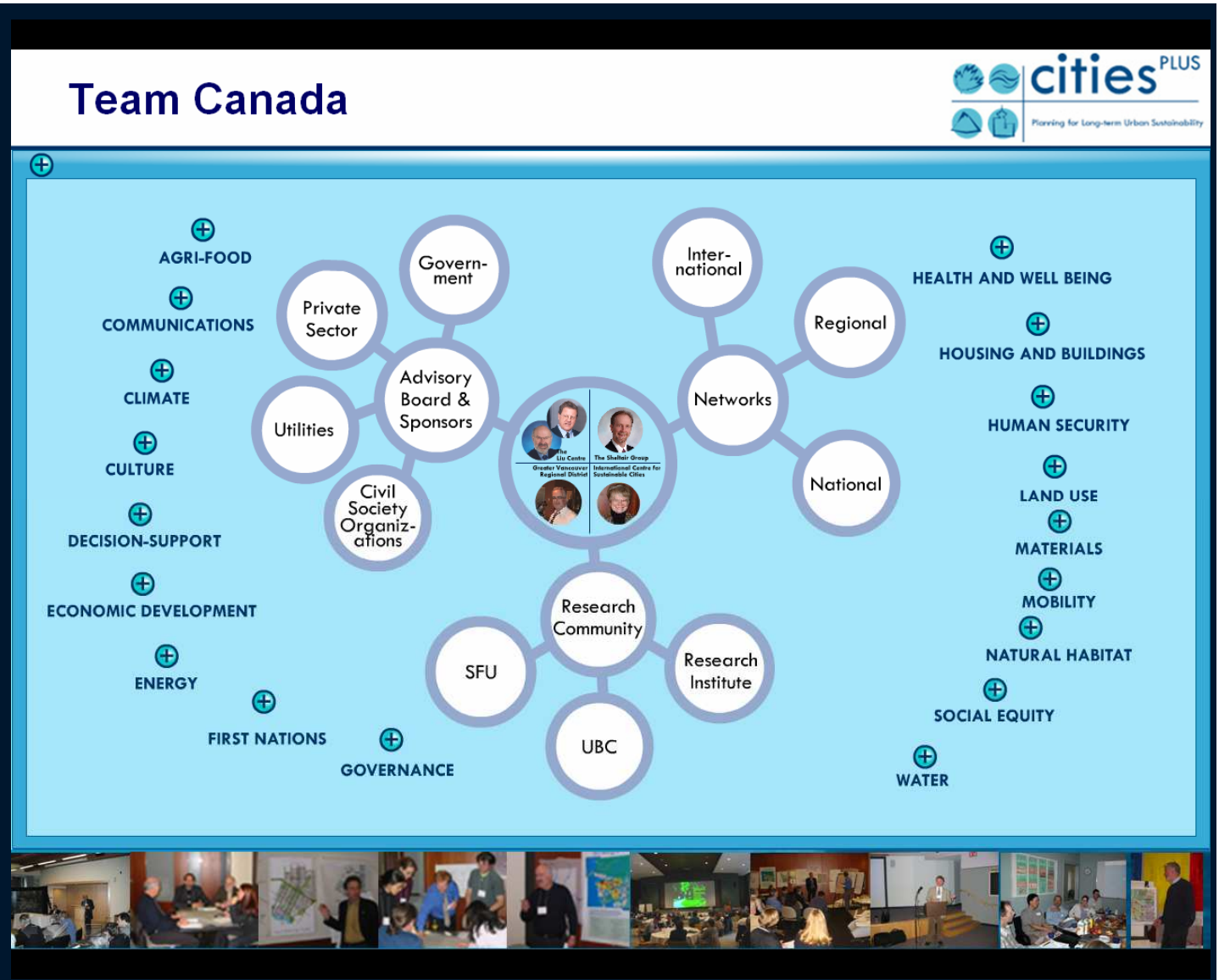
*What happens if we try bridging to the future?*

# The Vancouver Region



# Three Conclusions

1. Long-term design makes possible a collaborative process



# Three Conclusions

Regeneration  
Livability  
Resiliency

2. Sustainable systems must be resilient systems



Integrated design with risk assessment



Adaptable management

# Three Conclusions

3. New  
'catalyst  
strategies'  
can help to  
manage the  
change



# Catalyst Strategies

Click on each catalyst strategy to see the municipality transform



Ribbons of Blue, Webs of Green



Multi-use Convertible



Diversity of Choices



Short loops - Integrated Networks



Net Contributors



Shock Resilient Cells



Green Import Green Export



Experiment and Learn

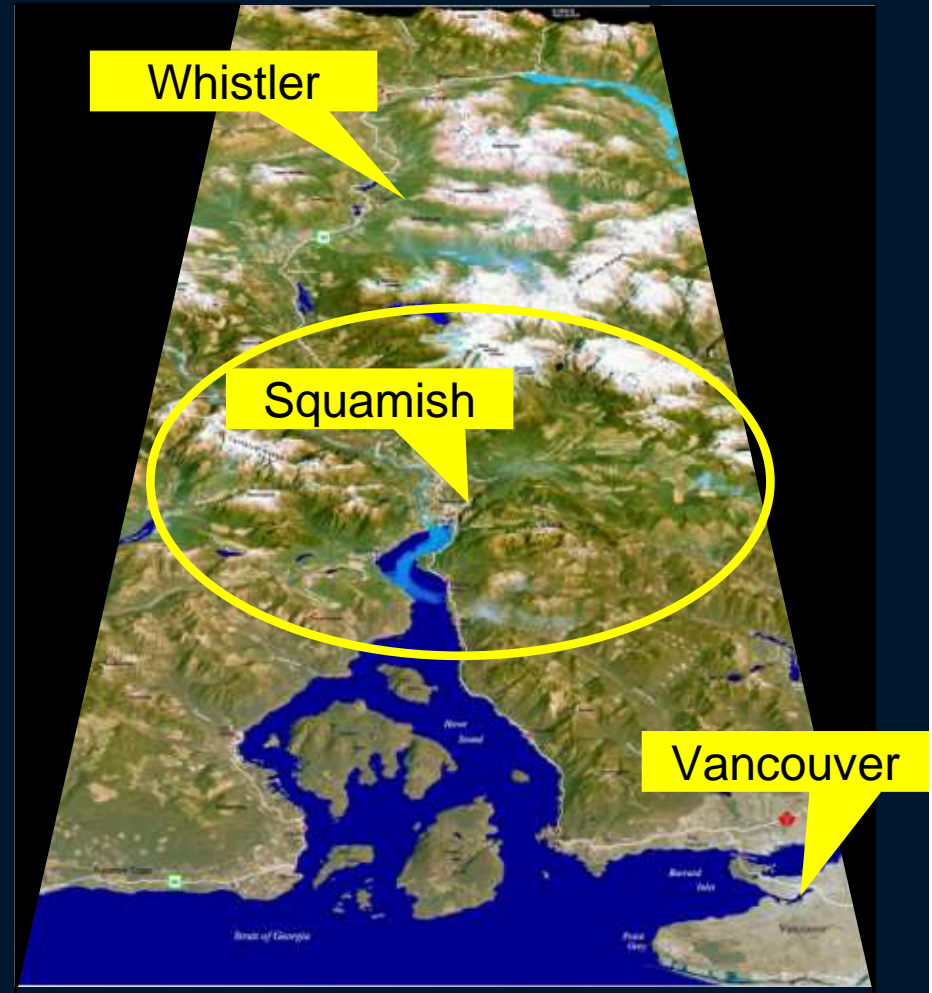
## RIBBONS OF BLUE, WEBS OF GREEN



# From *citiesPLUS* to *Bridging to the Future*

	Planning Horizon	Scale	Scope
<i>citiesPLUS</i>	100-year	Regional (Greater Vancouver)	18 urban systems
	↓	↓	↓
<i>BttF Case Study</i>	30-year	Cross-section of region	2 urban systems (energy & water)

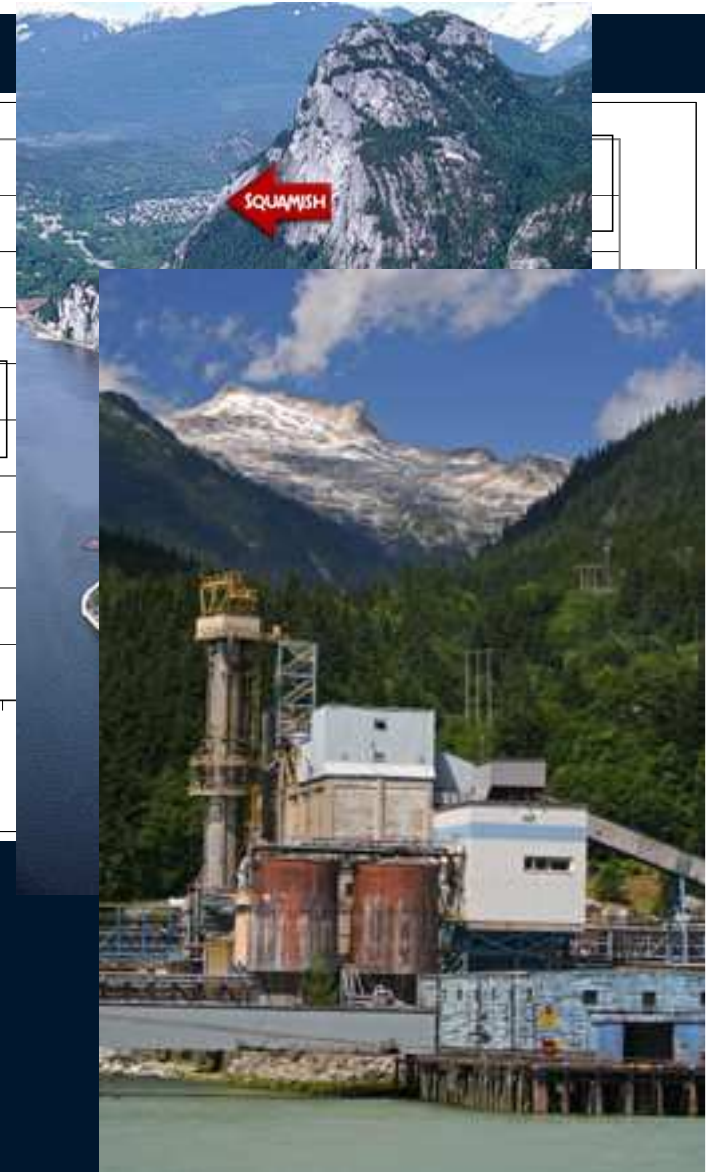
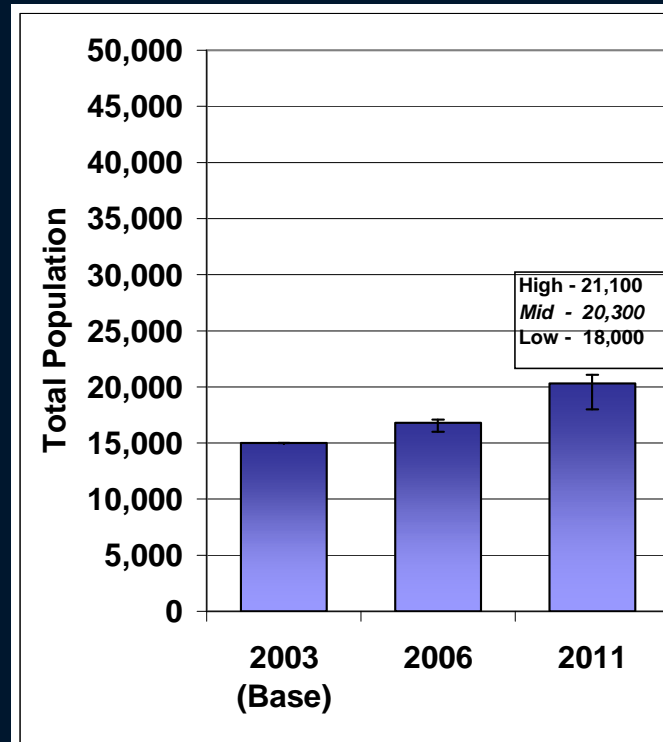
# The Sea-to-Sky Corridor





# The Squamish Case Study

- Fast growth
- 2010 Olympic infrastructure investments
- Economy in transition
- Sheltair, UBC, NRCan conducting related studies



# Special Challenges

□ Trends in the wrong direction:



# Trend: Reactive planning, with little thought to ecological functions & natural hazards



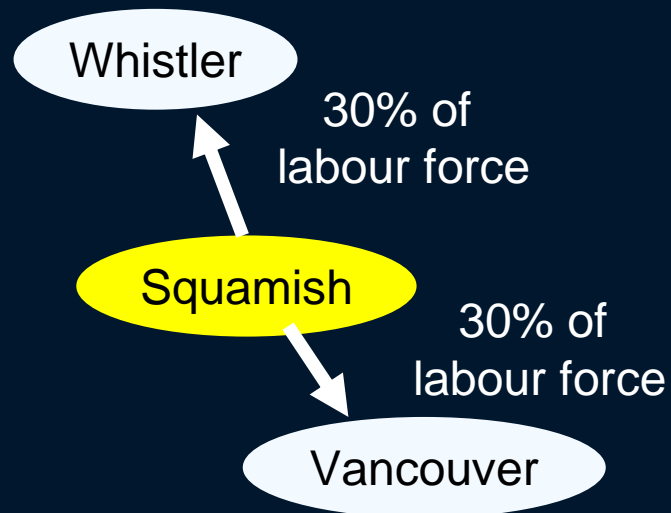
**Diverse habitat  
impacted by human  
activities**



**Recent flooding**

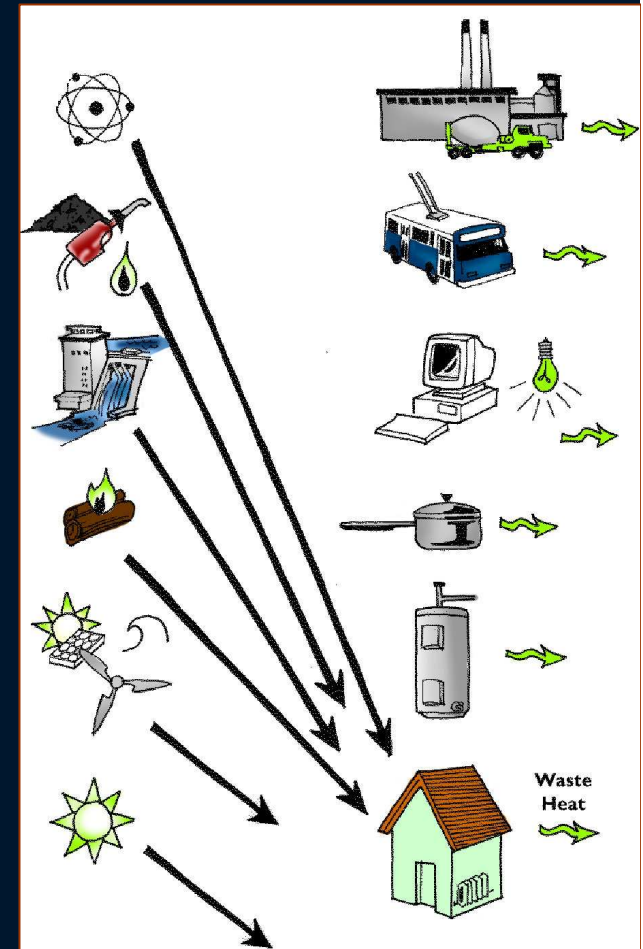
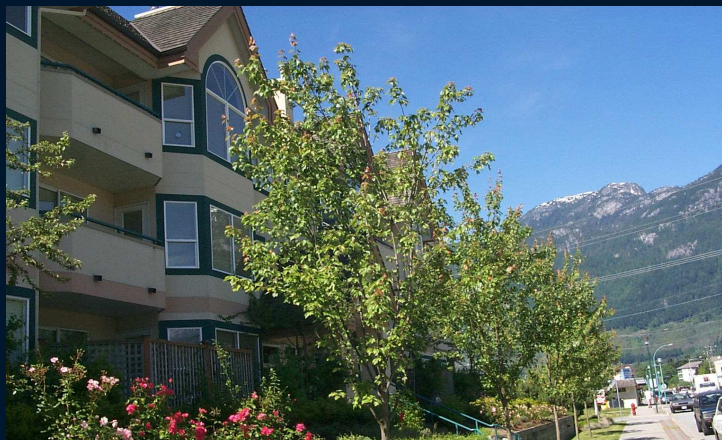
# Trend: To greater consumption per capita

- ❑ Automobile and building consumption
- ❑ Sprawl and big box
- ❑ Commuting, bedroom community



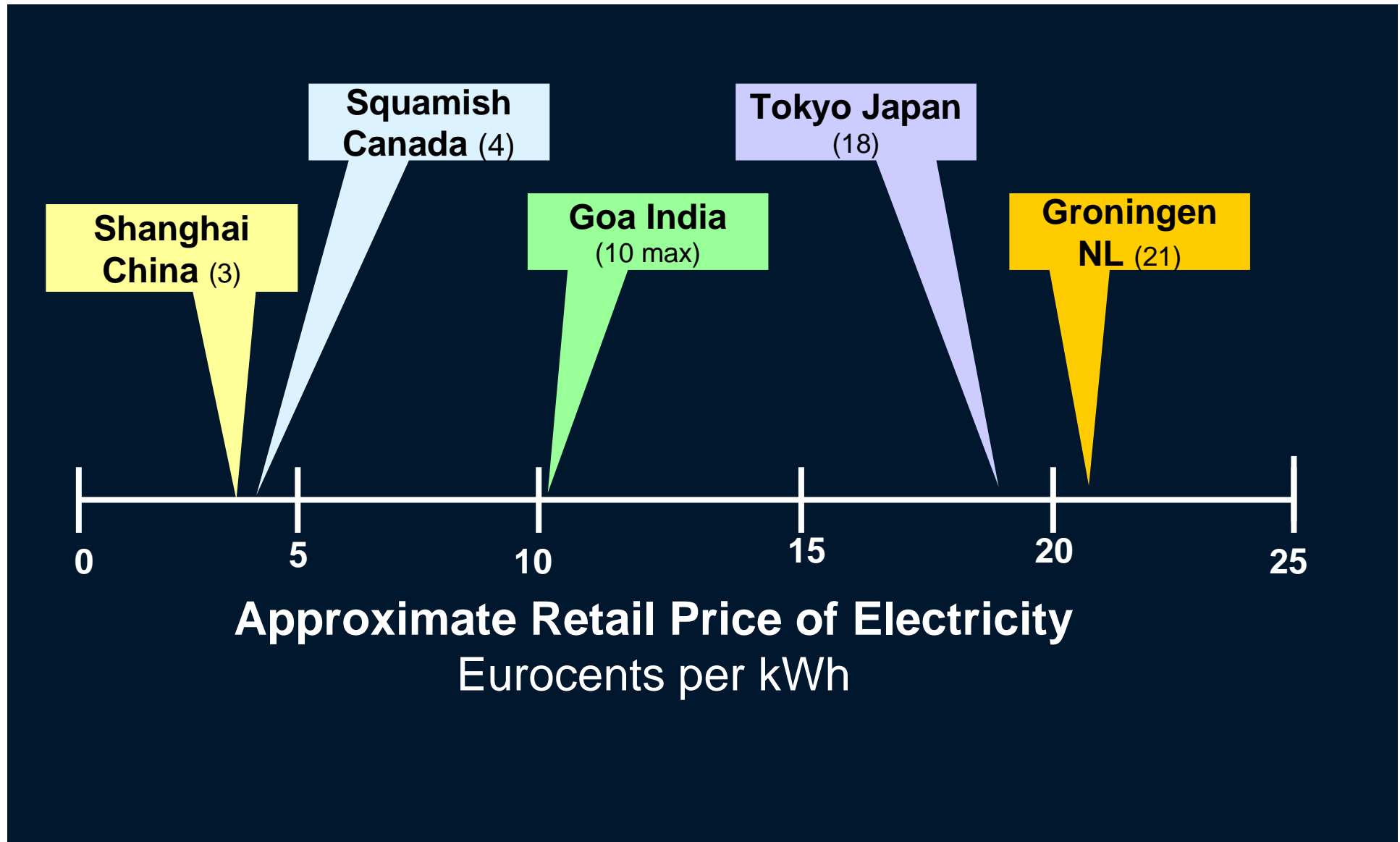
# Trend: Exergy mismatch

- Growing mismatch between resource quality and the requirements of the end use  
e.g. electric baseboard heaters



**Inappropriate Matching  
of Energy Quality & End Use**

# Special Challenge: Low Energy Prices



# Trend: Top down, one size fits all

- ❑ Lack of local input into energy resource development
  - New provincial regulations have IPP projects bypassing local government
  - Community interests viewed as an impediment to rapid resource development and economic growth
- ❑ Sea-to-Sky Highway



# Other Special Challenges

- ❑ Rapid growth – little time to plan ahead
- ❑ 75% of land base is constrained
- ❑ No mandate for energy planning and therefore
  - No funding without exceptional effort
  - No systems perspective possible
- ❑ Rapid changes in energy industry make-up
- ❑ Municipalities have no mandate, no training, no budget, no time





# Frozen Future

- ❑ Business as usual is the likely scenario without major interventions
- ❑ Bridging will not happen on its own



# Turning the Corner

- ❑ Huge interest in developing Squamish sustainability at all levels - residents, council, utilities, government, industry
- ❑ So how do we turn the corner and make sustainable energy pathways a reality?



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Experiment  
and Learn

▶ SEE TRANSFORMATION

