

CONSULTING PROJECT:

ARIZONA-CANADA SUPPLY CHAIN LANDSCAPE ANALYSIS



CONSULTANTS:

EDWARD MATLOUB

MATT WILLIAMSON

FIKRE GURJA

SAMPAD DAS

YUTAKA OYAMA

ROHAN VERMA



PROJECT GOALS

- Analyze the trade trends between Canada and MAG region
- Identify industries and companies crucial to trade between the two regions
- Identify economic development opportunities based on these industries and trading trends



PHASES

Phase 1: Identify goods traded between Arizona and Canada

Phase 2: Identify Canadian Provinces/Metros that do the most trade with the MAG region

Phase 3: Identify key companies and Metro specific trends

Phase 4: Analysis Results & Final Recommendations

by April 30, 2012

KEY FINDINGS

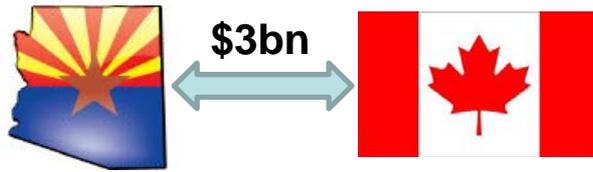
- **STRONG BI-COASTAL TRADE PATTERN**
- **AEROSPACE: INTEGRATE, COLLABORATE, CONSOLIDATE**
- **CLEAN-ENERGY: COMPETITIVE ADVANTAGE, OPPORTUNITY TO TRADE WITH CANADA**
- **INDUSTRY SPECIFIC CLUSTER DEVELOPMENT IS ESSENTIAL FOR FURTHER DEVELOPMENT**

Why Canada?

- **Significant Trading Partner:**

- 2nd largest export market

- 4th largest import market



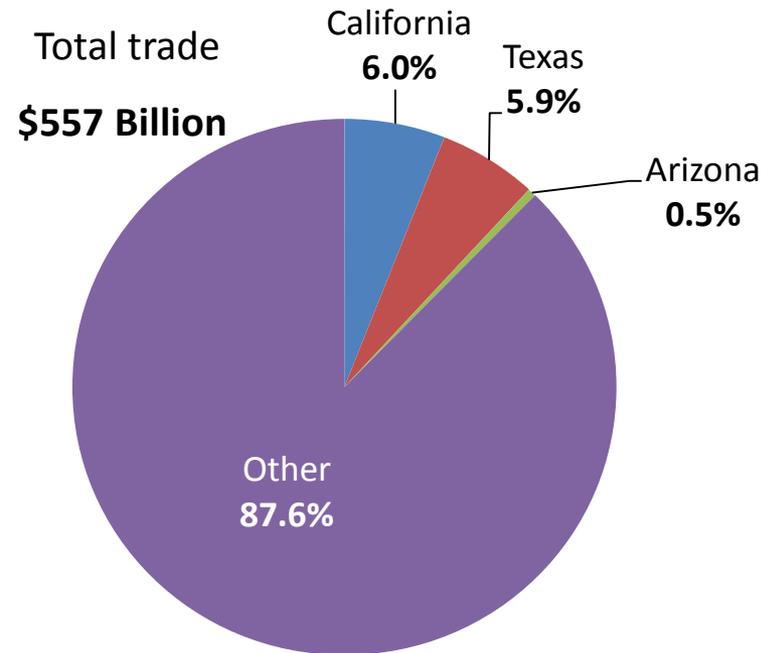
Source: US Census Bureau – Foreign Trade

- **Cultural & economic fit:**

- *Tourism*
 - *Investment*
 - *Trade*

- **Canadian-owned companies employ 13,156 people in 736 locations in Arizona!**

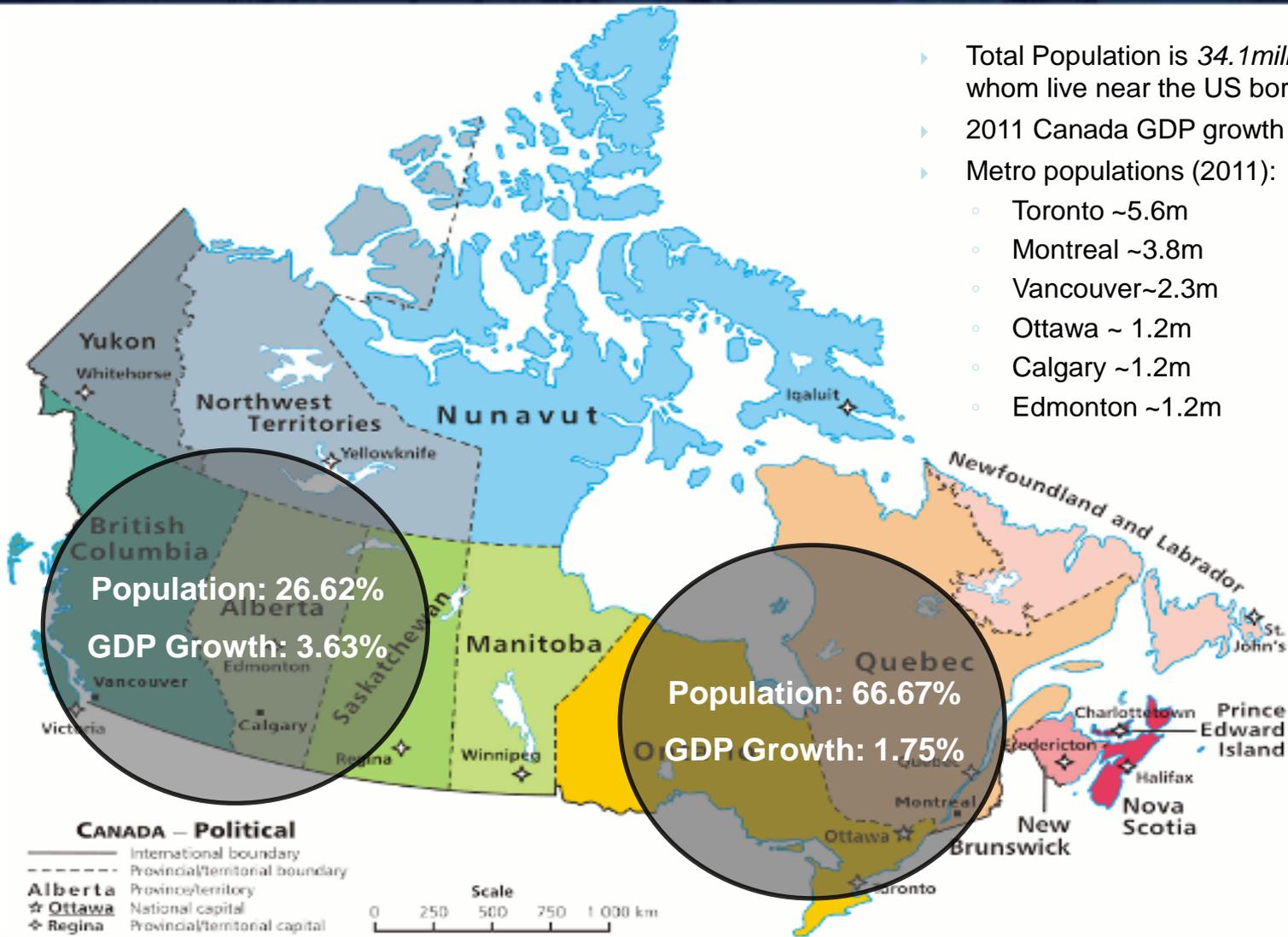
US-Canada bilateral trade 2011



Source: Industry Canada Trade Data Online

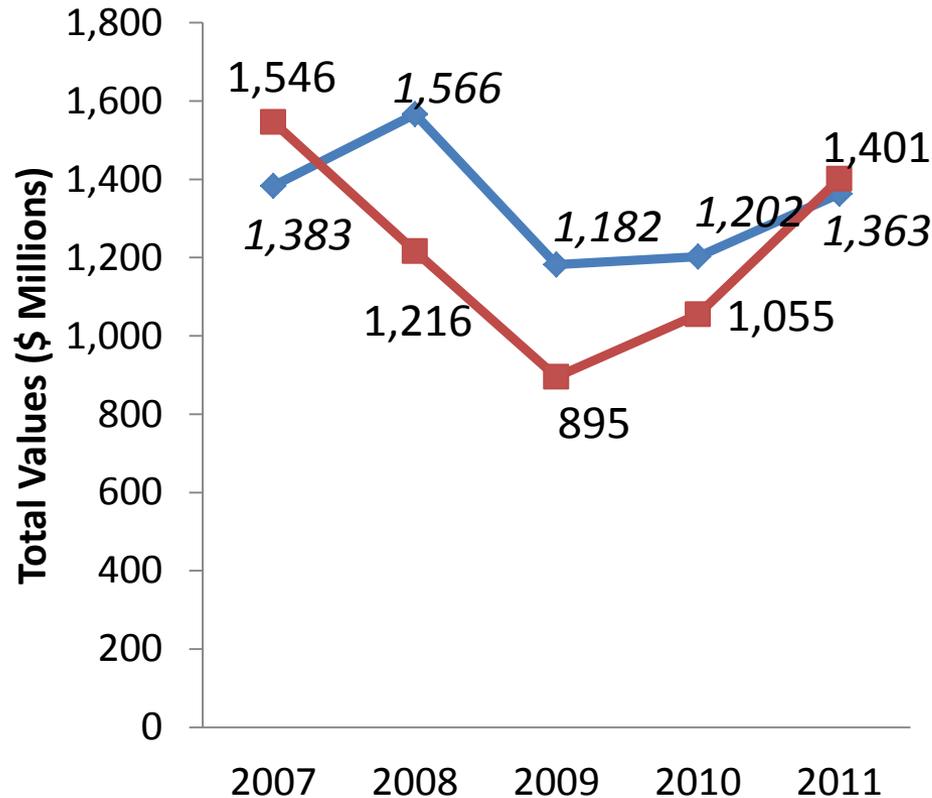
Canadian Provinces

- ▶ Total Population is *34.1 million* the majority of whom live near the US border
- ▶ 2011 Canada GDP growth at 2.3%
- ▶ Metro populations (2011):
 - Toronto ~5.6m
 - Montreal ~3.8m
 - Vancouver~2.3m
 - Ottawa ~ 1.2m
 - Calgary ~1.2m
 - Edmonton ~1.2m



Trade between Arizona and Canada

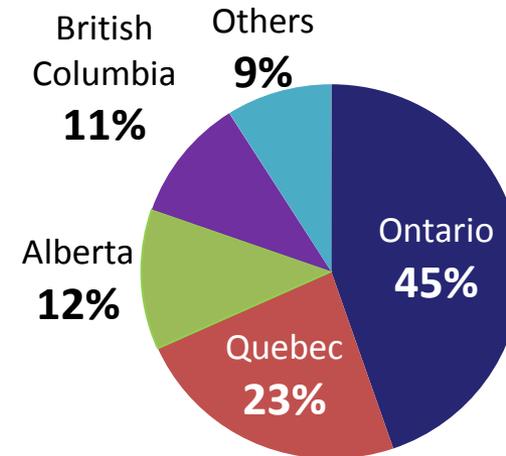
Trade Trends



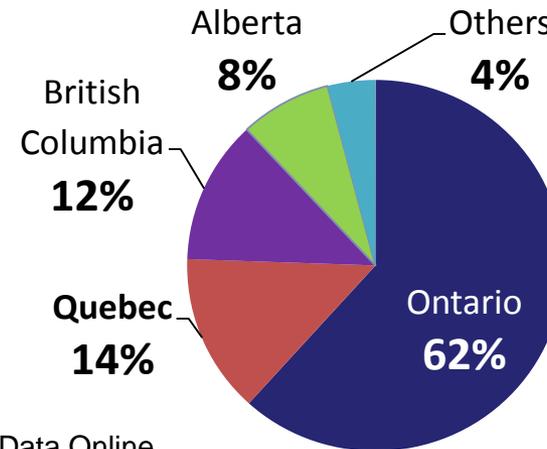
◆ AZ Exports to Canada ■ AZ Imports from Canada

Source: Industry Canada Trade Data Online

% of Total Exports by Region - 2011



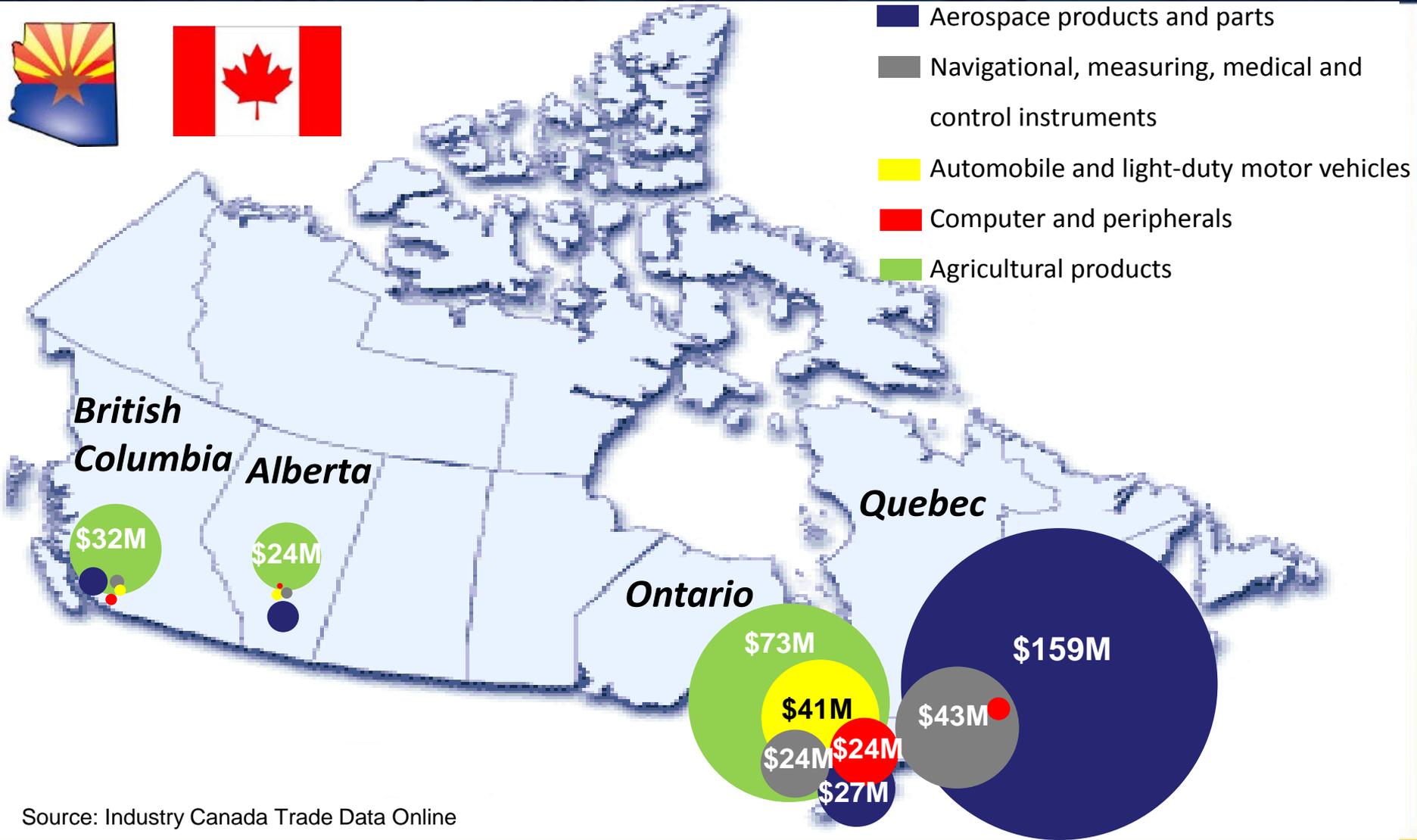
% of Total Imports by Region - 2011



AZ Exports to Canada - 2011



- Aerospace products and parts
- Navigational, measuring, medical and control instruments
- Automobile and light-duty motor vehicles
- Computer and peripherals
- Agricultural products

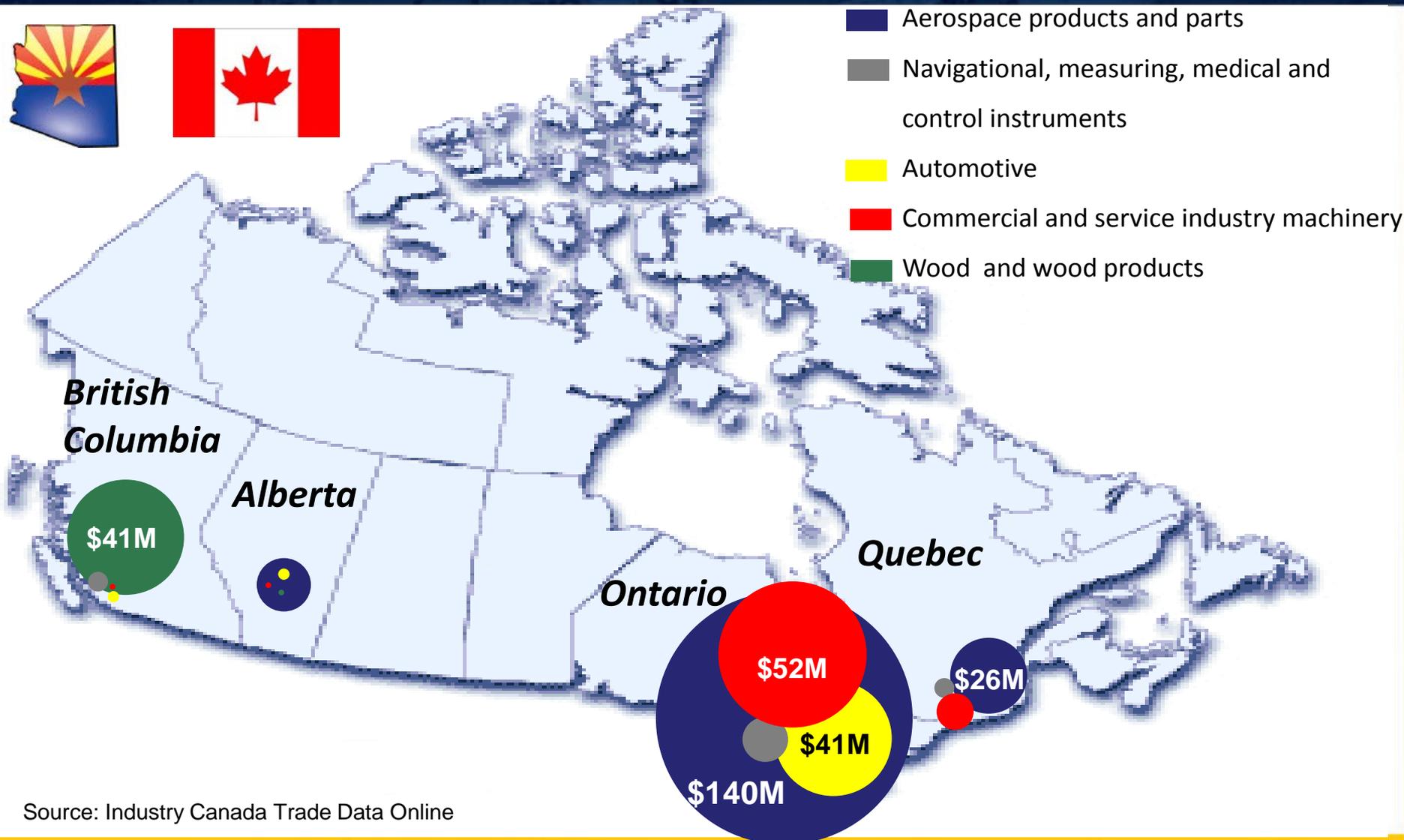


Source: Industry Canada Trade Data Online

AZ Imports from Canada-2011



- Aerospace products and parts
- Navigational, measuring, medical and control instruments
- Automotive
- Commercial and service industry machinery
- Wood and wood products



Source: Industry Canada Trade Data Online

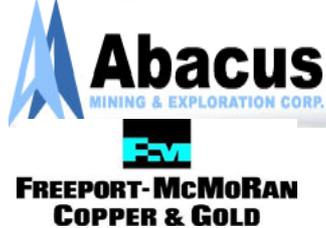
Canadian Metro Landscape

Vancouver

Digital Media



Mining



Technology



Calgary/Edmonton

Energy



Utilities



SURE Cluster



Toronto

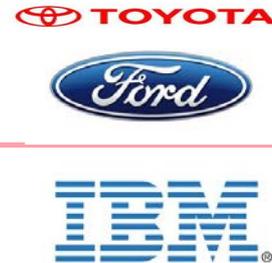
Aerospace



Finance



Automotive



Montreal

Aerospace



Life Sciences



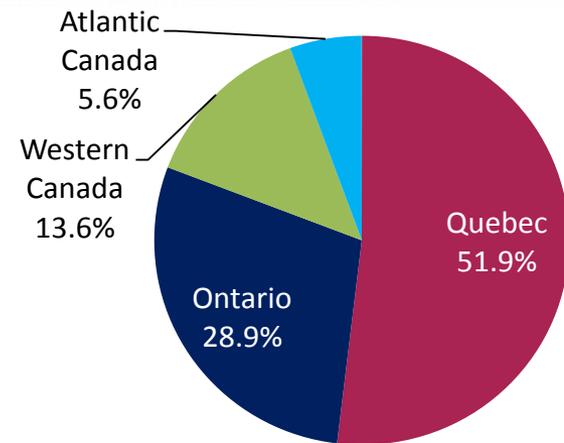
Technology



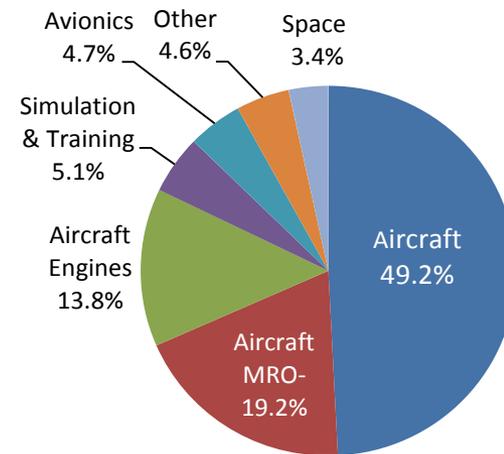
Canada - Aerospace Landscape



- Aircraft assembly & engine manufacturing
- Aircraft parts manufacturing & systems development
- Robotics, navigation systems & MRO
- Helicopter services , training centers & design



Canadian aerospace revenue by region



Canadian aerospace revenue by subsectors

Aerospace: Bilateral Trade



Honeywell



Honeywell



BOMBARDIER

- Honeywell leading supplier of Avionics, Propulsion Systems and APUs in Bombardier's product line.
- Booming Asian Aerospace industry strengthens this relationship



Increased trade & collaboration

Aerospace Action Plan

Goal

Utilize academic institutions to attract and retain top aerospace firms

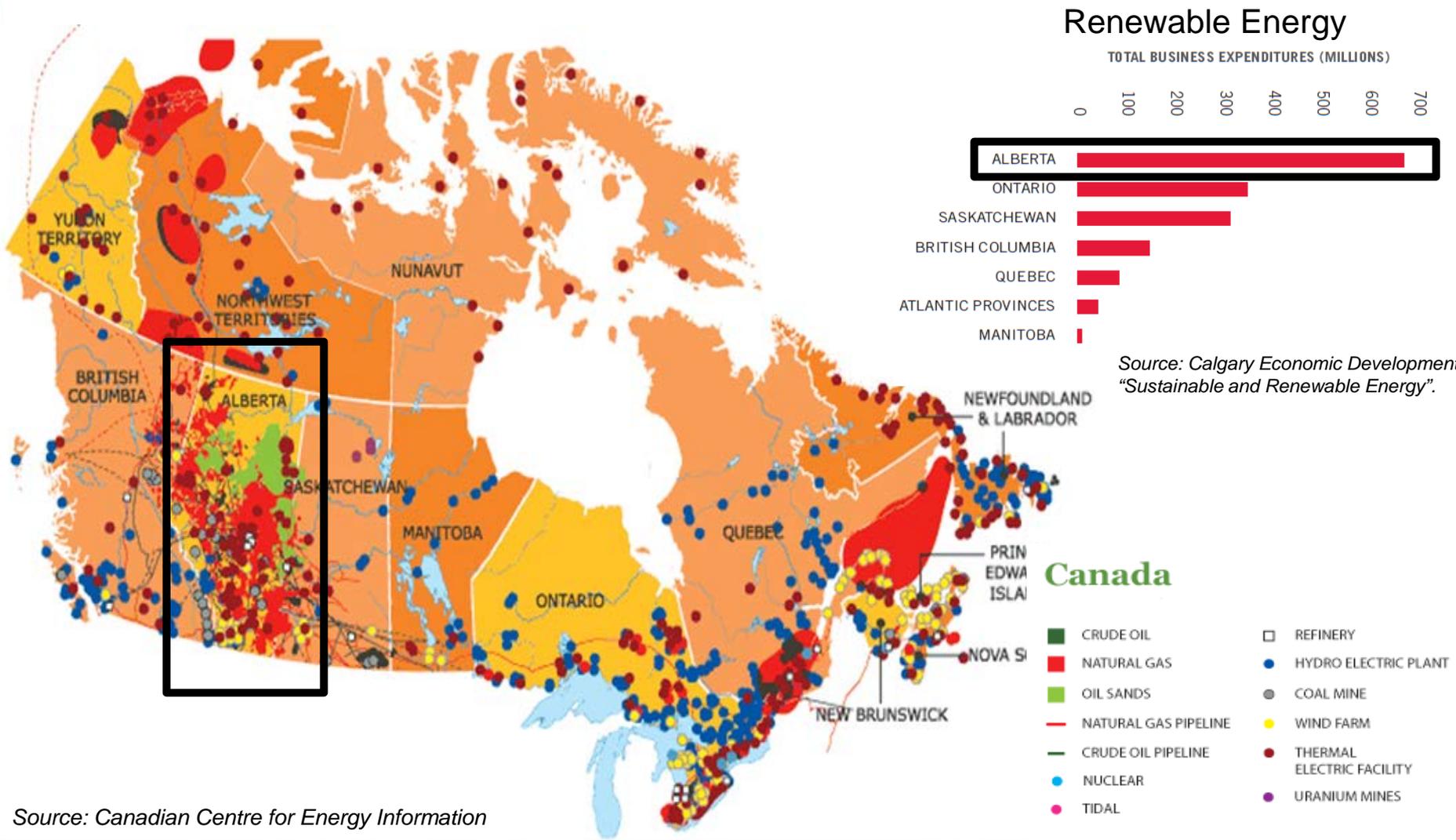
Academic Competitive Advantage

Institute	Core Competencies
	Aerodynamics and Fluid Mechanics, Helicopter Electromagnetics, Control Systems, Combustion Dynamics, Aeronautical Management Technology

Opportunities

Companies	Research Institute	Education	Industrial Association
  		  	

Canada – Energy Industry Landscape



Source: Calgary Economic Development: "Sustainable and Renewable Energy".

Epcor's \$470mm Investment in AZ

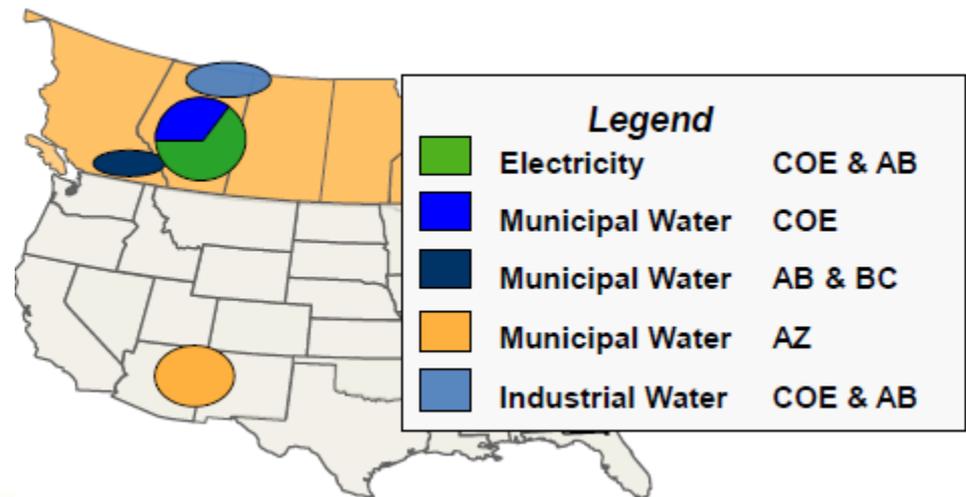
- Diversified electricity and water services provider headquartered in Edmonton, Alberta
- Wholly-owned by the City of Edmonton for over 100 years
- Strategy:
 - Pursue rate regulated and long term contracted investment opportunities

Acquired



AMERICAN WATER

Chaparral City Water Company

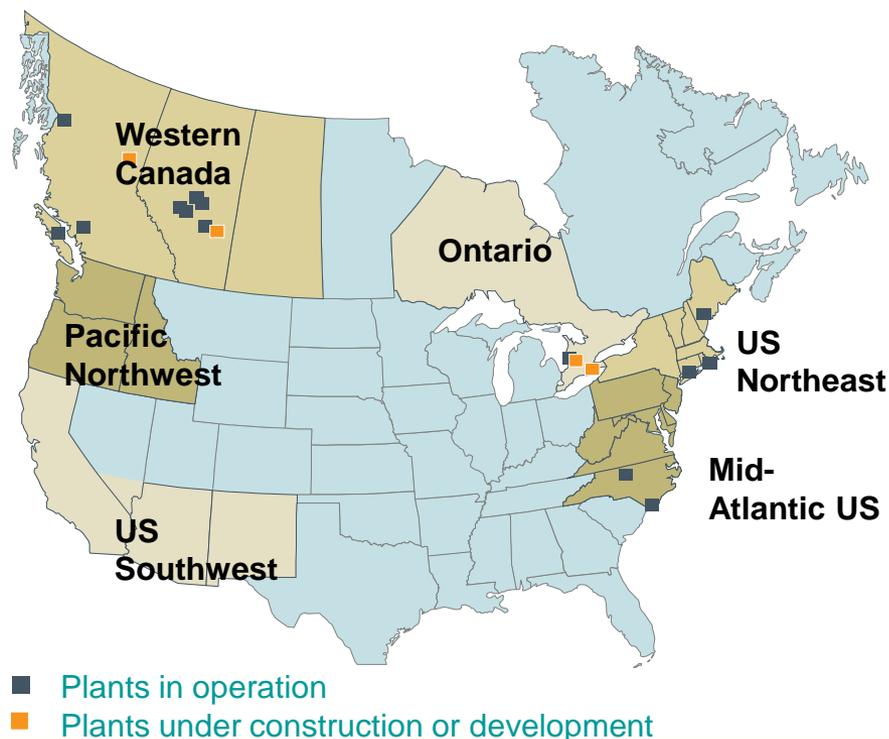
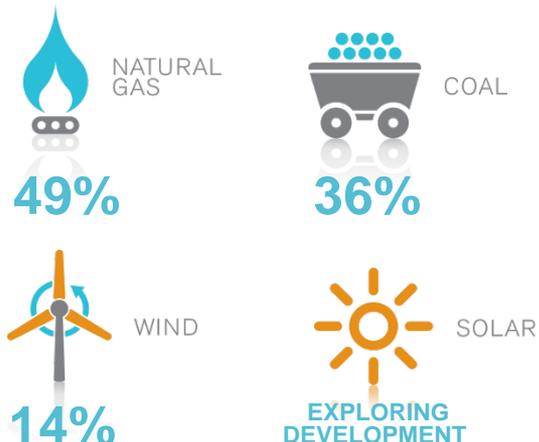


Source: EPCOR Utilities Inc.:
Investor Presentation-Feb 2012

Capital Power Opportunity

- Solar Sales in the valley are rising and investment is increasing
- Epcor has a minority interest in Capital Power
- Opportunity for Capital Power to expand Energy (Solar) presence in the valley
- Solar special use permit anticipated to be filed Q1-2012

- Capital Power's Operations and growth focus on four energy sources:



Source: Capital Power Corporation:
Investor Meetings-Stuart Lee, SVP
Finance & CFO. January, 2012

Renewable Energy Action Plan

- **AZ Solar Industry: \$2bn, 16K jobs**
- **Growth - 333% v/s 109% US avg.**
- **Additional 2,100 jobs; more than \$1 billion invested since 2010**



- **Aggressively promote renewable energy target of 15% by 2025**
- **Strengthen associations like AriSEIA – major competitive advantage**

Figure 1-1: U.S. PV Installations, 2010-2011

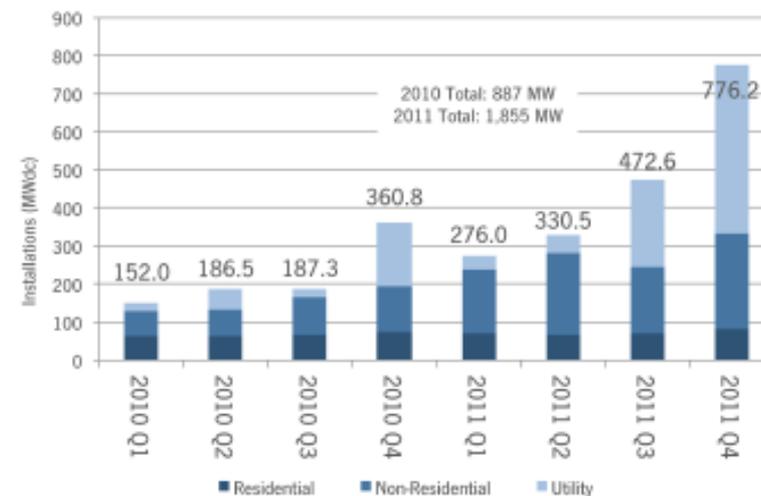


Figure 1-2: 2010-2011 PV Installations by State

RANK ('10)	RANK ('11)	STATE	2010 (MW)	2011 (MW)
1	1	California	259	542
2	2	New Jersey	132	313
3	3	Arizona	63	273
7	4	New Mexico	43	116
5	5	Colorado	54	91

Summary

Western Canada

- Focused on Tourism & Investment
- Top trading industry: Agriculture
- Opportunity to promote & partner in clean energy growth focus

Eastern Canada

- High value trading partner
- Top trading industry: Aerospace & Equipment manufacturing
- Consider: Supplier database for Aerospace & research partnership with Institutions

Partnership with industry clusters , trade associations & Economic Development Committee's is vital

Important Observations

- **Establish working relationships with Economic Development Committee's in major Canadian metros**
- **Ensure that industry clusters in key Canadian cities are aligned to those in AZ**
- **Infrastructure must support these clusters**

THANK YOU FOR YOUR TIME

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Q & A

