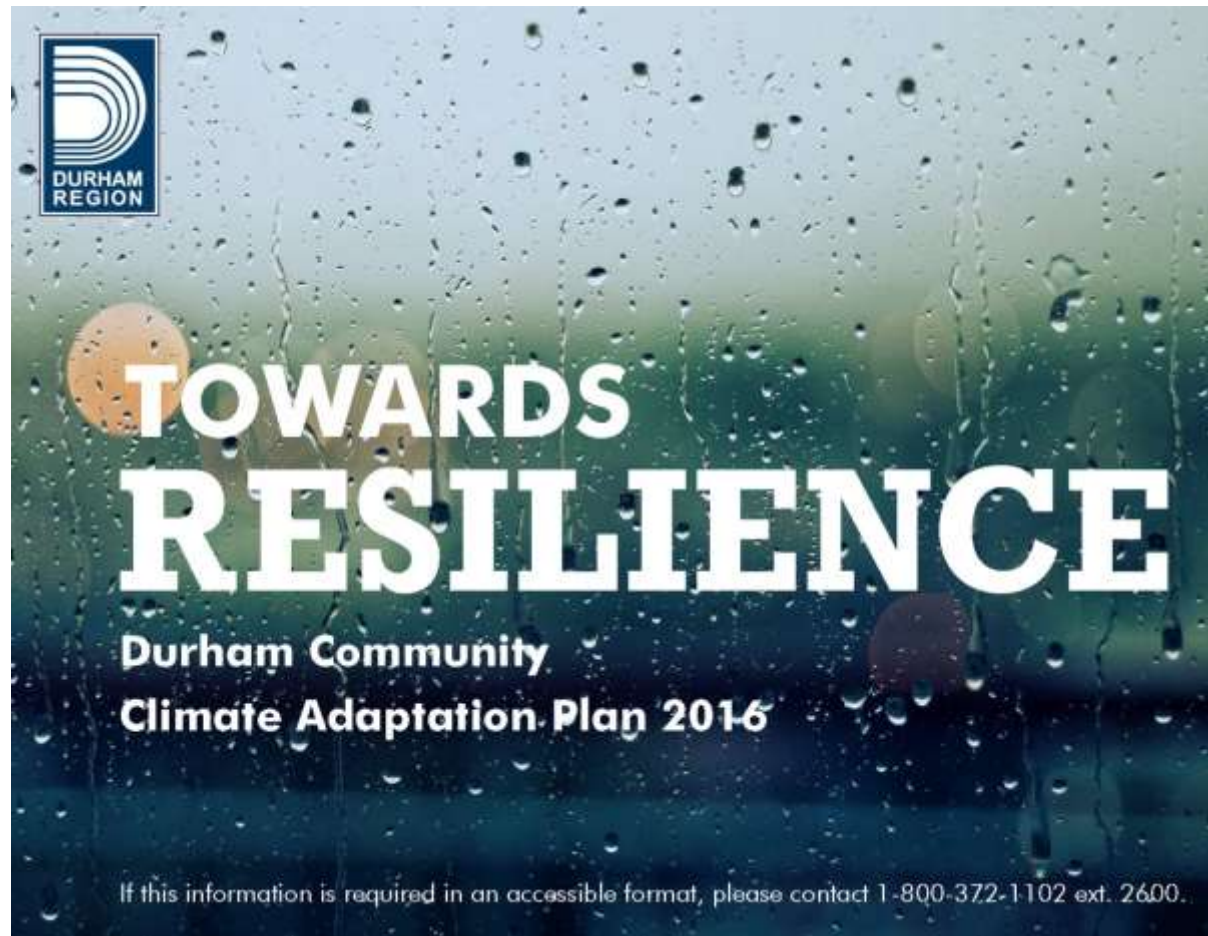
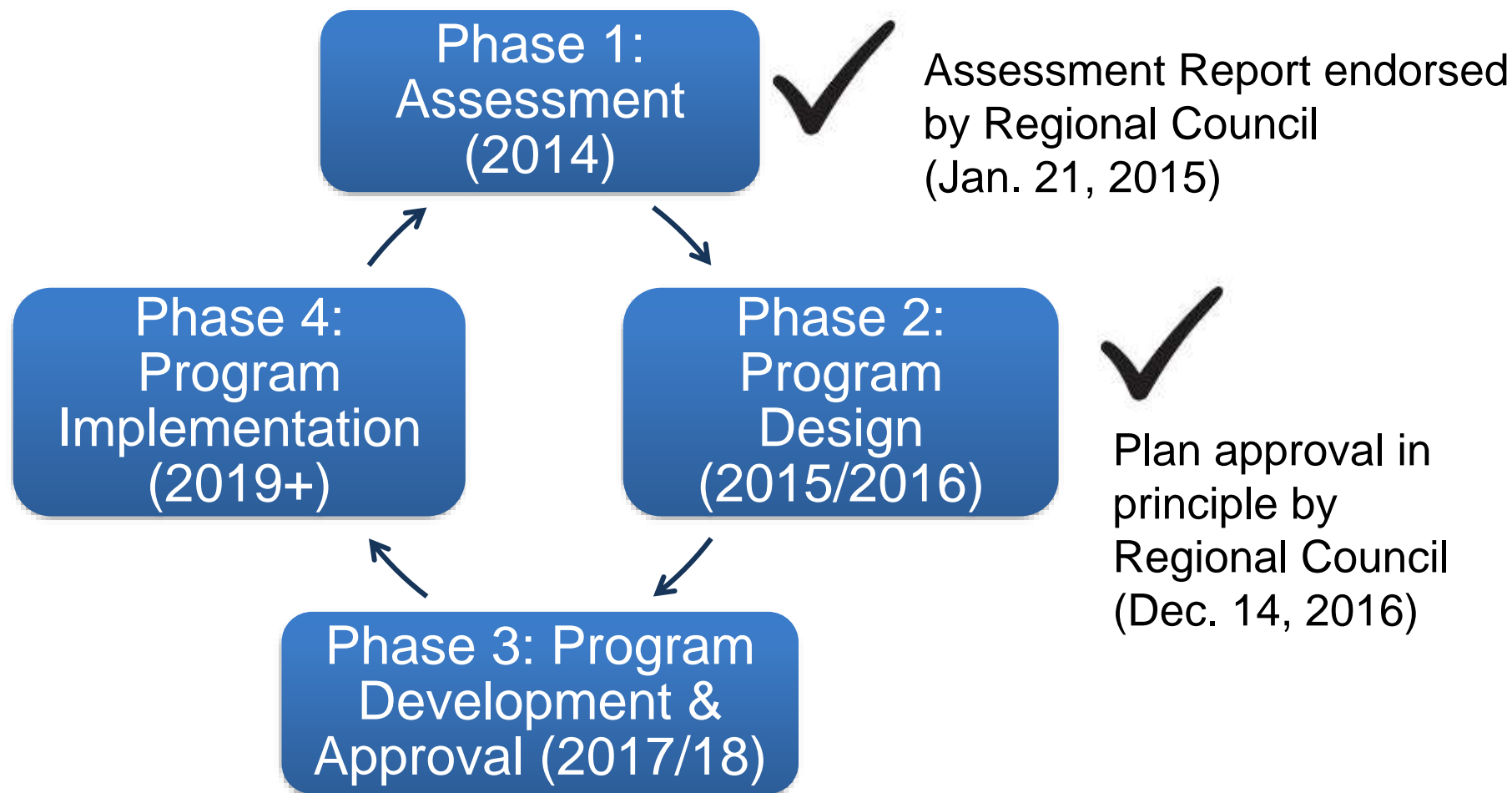


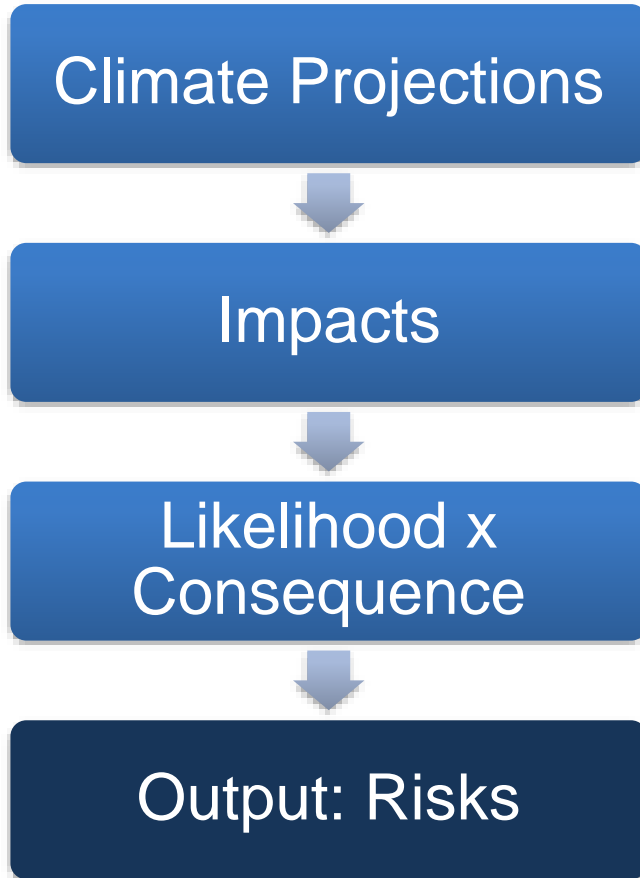
Climate Adaptation Planning – The Durham Approach



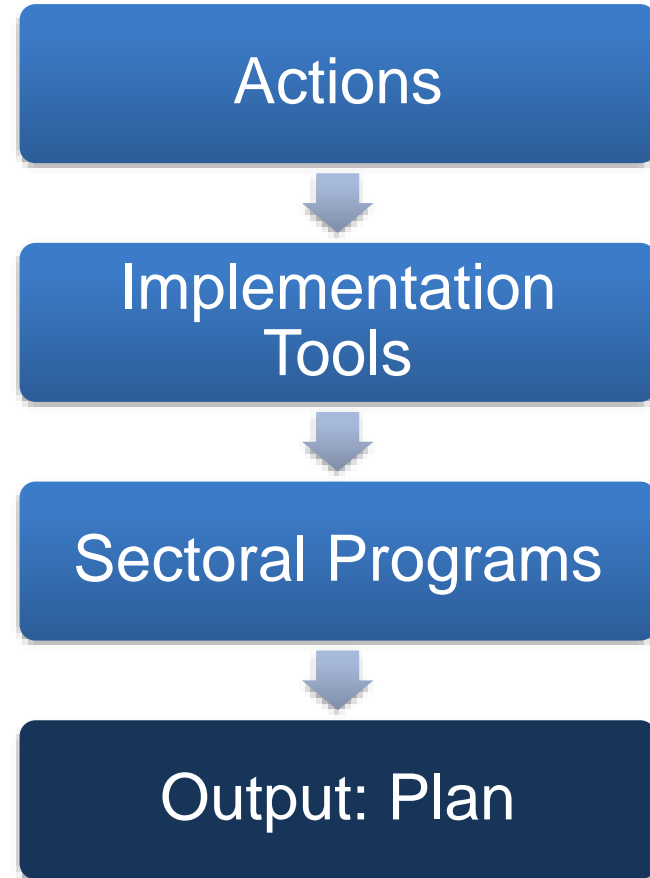
Phasing and Schedule



Phase 1



Phase 2



Phase 3

- Referral to responsible agencies/partners
- Further joint program development (next steps)
- Costing
- Incorporation into future business plans
- Annual reporting on progress

Process Characteristics

- Scientifically-based – SENES future climate study
- Consultative – stakeholders across Durham
- Rigorous – risk analysis
- Peer-based – best practice analysis among municipalities
- Collaborative – experts from stakeholder agencies created program proposals (ETFs)
- Comprehensive – six sectors addressed, more to come

8 Sectors – 18 Programs

1. Cross-Sectoral
2. Buildings Sector
3. Electrical Sector
4. Flooding Sector
5. Health Sector
6. Roads Sector
7. Natural Environment Sector
8. Food Security Sector (placeholder for future development)

Roles and Responsibilities

Responsible Agencies:

- The Region of Durham
- 8 Local municipalities
- 5 Conservation authorities
- 4 Electrical utilities
- Provincial agencies
- Federal agencies
- Private sector

(page 73 & 74)

“It is expected that responsible agencies will respond to this Plan in a phased and measured manner consistent with their risk management policies and practices. Ultimately, however, it will be the role of each responsible agency to make informed decisions within its legal obligations and financial resources on whether and how to implement the programs recommended in this Plan.”

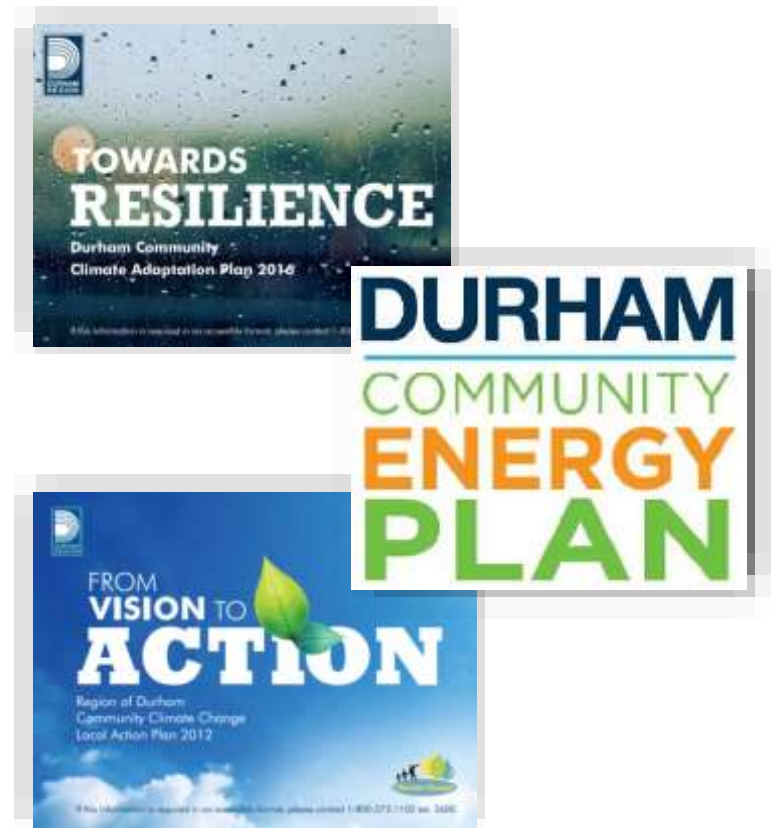
Keys to Our Success

- Governance structure: DRRCC
- Our future climate conditions: SENES Study
- Our Workhorses: Expert Task Forces

1. Durham Region Roundtable on Climate Change (DRRCC)

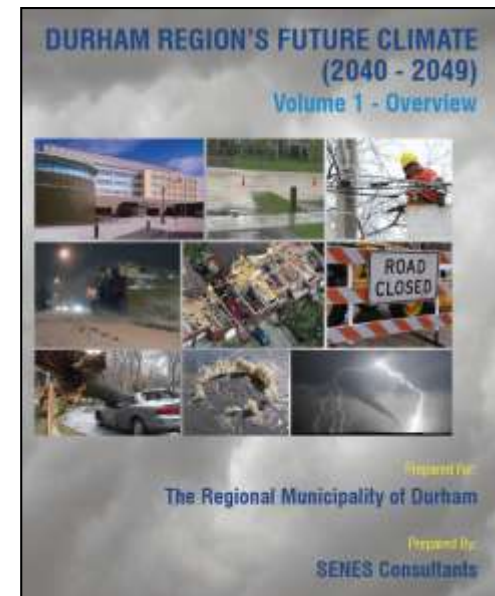
- An official committee of Regional Council with monthly meetings
- Membership:
 - Regional Chair
 - 4 Regional Councillors and 4 alternates
 - CAO / Commissioner of Planning
 - citizen members for small & large business, university, building & development industry, education, students, health, food, and general community
- Mandate:
 - education & outreach
 - advocacy for policies, plans and programs
 - leadership

Products:



2. Climate Projections (SENES Study)

- 200 page projection of climate conditions in 2040s in Durham, completed Dec. 2013
- Modelled on Toronto study in 2011
- Data for all 8 local municipalities in Durham
- Downscaled to 1 km X 1 km cells (over city halls)
- Averages and extremes
- Resulted in much better understanding of climate impacts in Durham (removed skepticism)
- Warmer, wetter, wilder (pages 15 & 16)
- “Climate lock-in” (pages 13 & 14)



3. Expert Task Forces- Our Workhorses

- 7 Expert Task Forces: Buildings, Electrical Sector, Flooding, Food Security, Human Health, Natural Environment, Roads
- 63 experts from Region, municipalities, CAs, electrical utilities and private sector (Appendix 3)
- Phase 1: Assessment
 - Started with SENES Study
 - Identified impacts
 - Undertook risk assessment (likelihood X consequence) (Appendix 4)
 - Joint meeting to compare risk assessments
- Phase 2: Program Design
 - Identify actions
 - Group actions by implementation tools
 - Package into proposed programs
 - Design Charette



Expertise and stakeholder engagement

Oh, did I mention.....



Questions

