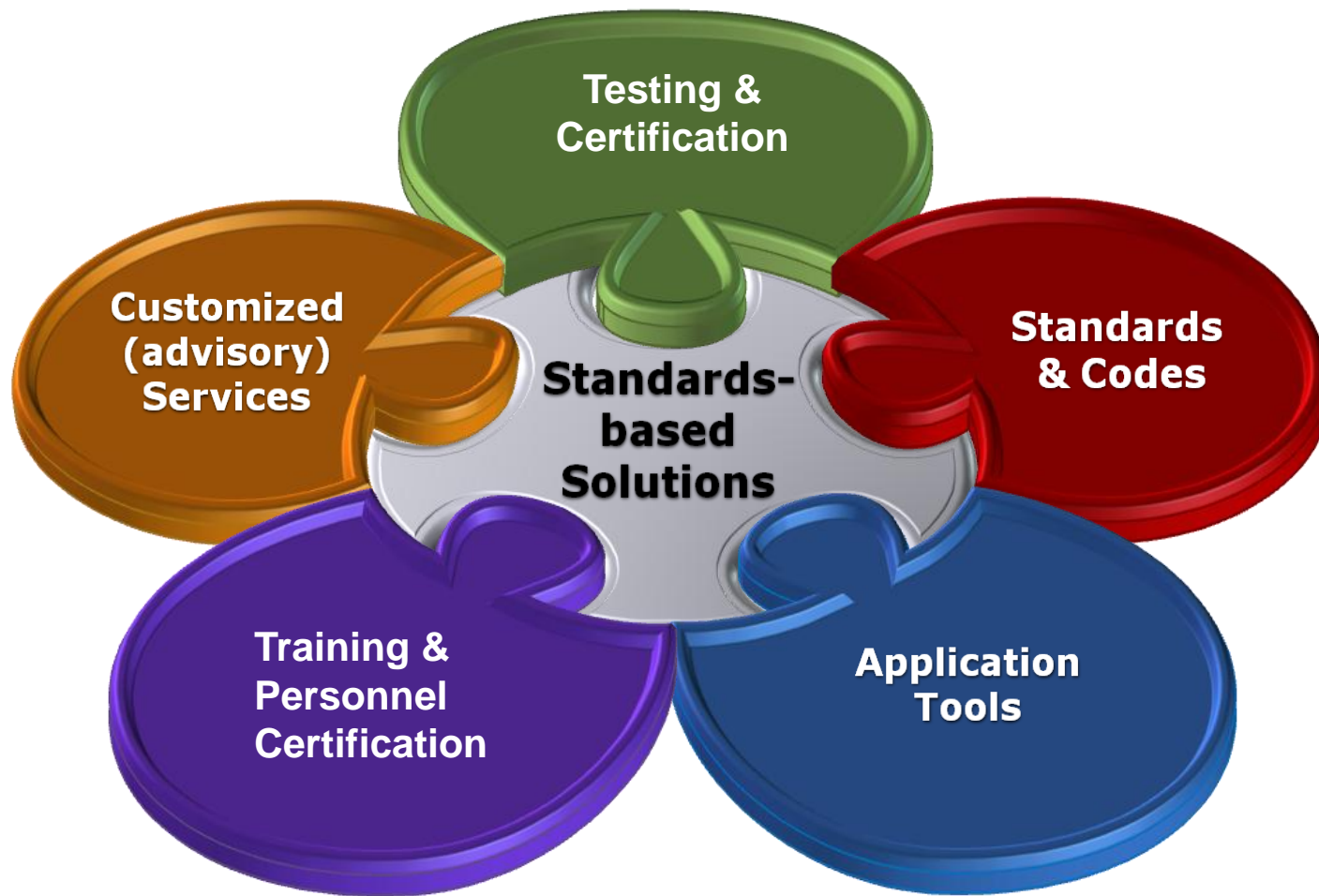


From Efficiency to Management: Trends in Energy

Suzanne Kiraly
CSA Group
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CSA Solutions



CSA: Facts and Figures

- 3000 published standards, 9000 members, 1400 staff worldwide
- Testing labs across Canada—Edmonton locally—US, and Asia
- 30 standards related to energy efficiency, oil and gas pipelines and pipeline security
- Lead International development of Environmental Management, Climate Change and Energy Management
- Recognized by NRCan (Energy Verification) and EPA (Energy Star) Testing and Certification body

Today's Energy Drivers

1. Ensure Supply: Access to and Security of Energy Sources
2. Cost improvement and Green Jobs
3. Reduced environmental Impact – carbon performance
4. Sustainable Manufacturing
5. Support Trade

Today's Headlines: "Canada continues global leadership on Energy Efficiency Improvement"

- NRCan announces funding for Projects that support the **Canada-US Clean Energy Dialogue** and support the development and **implementation of ISO 50001, the new international energy management standard.** This important tool will allow energy users to identify energy savings and to develop and implement actions to maximize energy performance.

Tools to Transform Energy Market Policy Makers & Private Sector

- ❑ Financial incentives
- ❑ Regulations
- ❑ Voluntary programs
- ❑ Leadership
- ❑ Information



Standards and Testing Support Introduction of New and Innovative Energy Technologies

- Photo Voltaic Panels, Hydrogen Fuel Cells, **Wind** and Marine Energy, **Carbon Capture and Storage**, Electric Vehicles are being introduced using NA and International standards
- Over 60 stakeholders are working with CSA to adopt the **ISO 50001** into Canada
- CSA opened its first **PV testing laboratory in BC**, building a second in New Mexico with German partner.

The Investment - Standards

- Direct cost for CSA EE&R standards program (4 years) is **\$4.7 Million**
- In-kind contribution for members participating on TCs and TSCs estimated at **\$5.2 Million**
- Total number of new national standards published in the past **four years** in both official languages - **37**

The Payoff: More efficient products, reduced emissions and big savings!

	Electric GWh (\$M)	Gas m ³ x10 ⁶ (\$M)	Total PJ (\$M)	Equivalent # of Households (thousands)	Equivalent # of Power Plants
2005	1080 (\$70M)	50 (\$16M)	6 (\$86M)	51	0.4
2010	6250 (\$403M)	290 (\$110M)	34 (\$513M)	305	2
2015	24,490 (\$1,545M)	740 (\$248M)	117 (\$1,793M)	1,050	9
2020	31,110 (\$1,997M)	1,140 (\$385M)	156 (\$2,382M)	1,405	12

Note: The Payoff: NRCAN: EE Amendments 5-10: 2001-2008* (Projected Savings from Energy Efficiency)



Thank you

For more information:

suzanne.kiraly@csa.ca

416-747-4082