

# Engineering Networks Breakfast

[Co-sponsored by TRIEC and CAPE]



**TRIEC**

Toronto Region Immigrant  
Employment Council



DISCLAIMER: The AGM is sponsored by CAPE member contributions.



# CAPE 5th Annual Engineering Knowledge Conference: Nano to Mega: Engineering 2020



# Conference Program

09:00 – 09:35

## Conference Registration

10:00 – 10:15

Welcome Address

Opening Remarks and Member Updates

10:15 – 12:30

## Nano to Mega: Engineering and Convergence 2020

Our expert panel will discuss:

- Robotics: Research, Business, and Foresight
- Ontario Green Energy and Green Economy Act, the FIT Program and Renewable Electricity Production
- Energy Independence and Sustainability
- Environmental Sustainability and Management

12:30 – 13:15

## Luncheon

13:15 – 14:30

## Employer Networking, Recruitment and On-Boarding

- Employer/Recruiter/Sponsor booths
- One-to-one Job Finding Tips!

## e-Talent workshop: Building Competitive Workforce

- Mobile Knowledge Platforms
- e-Mentoring
- HireImmigrants.ca

14:30 – 15:30

## CAPE Annual General Meeting and Speaker

Open to CAPE members and the public

15:30 – 16:00

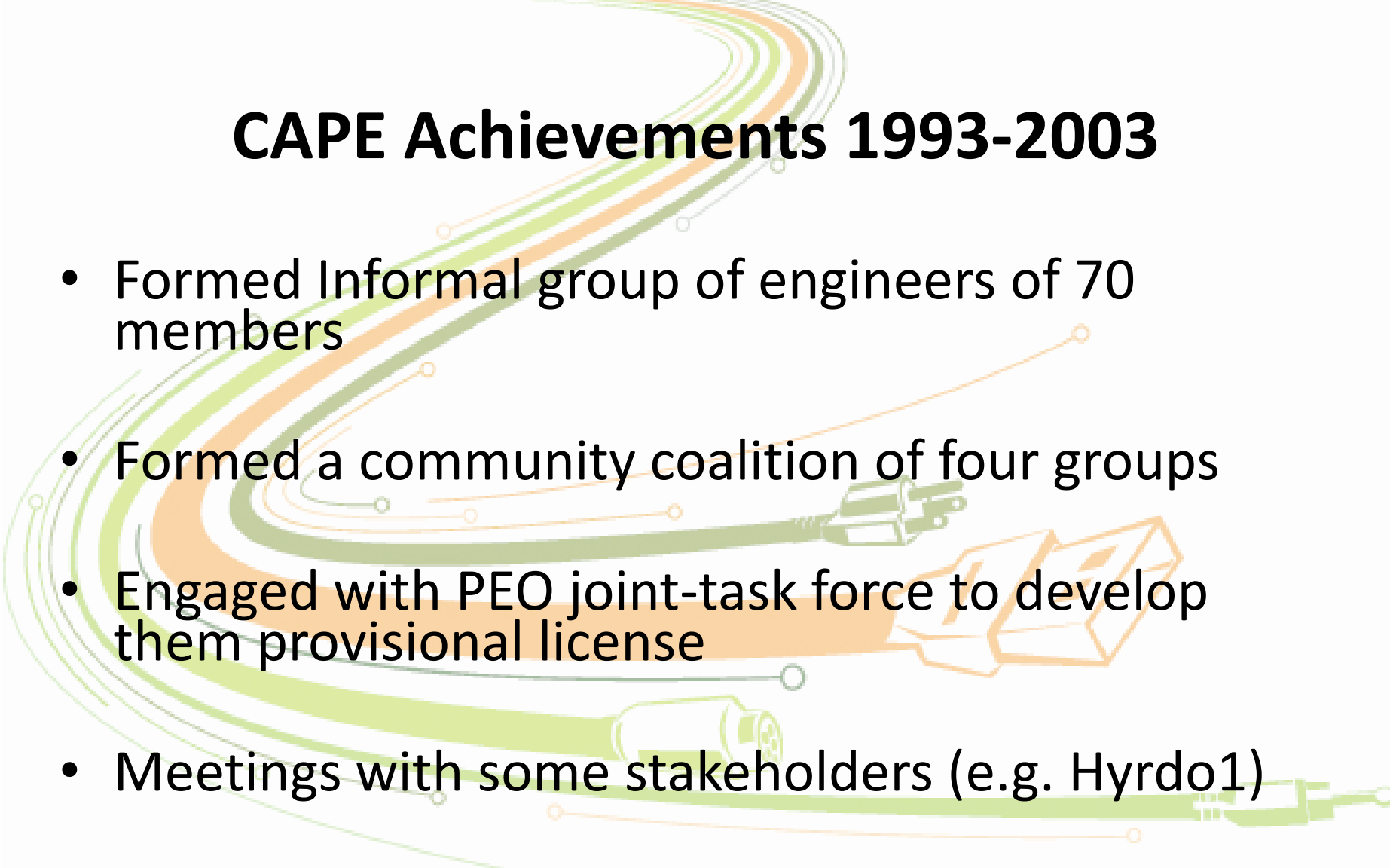
## Volunteer Appreciation and Closing Remarks



# WELCOME ADDRESS

Dr. Sergy Kasyanov, Board President,  
CAPE

# CAPE Achievements 1993-2003

- Formed Informal group of engineers of 70 members
  - Formed a community coalition of four groups
  - Engaged with PEO joint-task force to develop them provisional license
  - Meetings with some stakeholders (e.g. Hyrdo1)
  - Completed a strategic plan
- 
- A decorative graphic in the background of the slide. It features several concentric, wavy lines in shades of green and orange that curve across the upper half of the image. Below these lines, there is a stylized illustration of a green cable with a multi-pin connector. To the right of the cable, there is a simple orange outline of a house. Further down, there is a small green icon of a car or truck. The overall style is clean and modern, typical of a professional presentation.

# CAPE Achievements 2003-2006

- CASSA-CAPE **Engineering Access Project** (\$450,000+)
  - Documented barriers to meaningful employment
  - Introduced the **four-cohort model**
  - Build and served membership of 965 IEBs
  - Built Database the skills/competencies of IEBs
  - 6 Multi-stakeholder roundtables to develop an integrated employment strategy “**Canadian First to Canada First**”

# CAPE Achievements 2006-2010

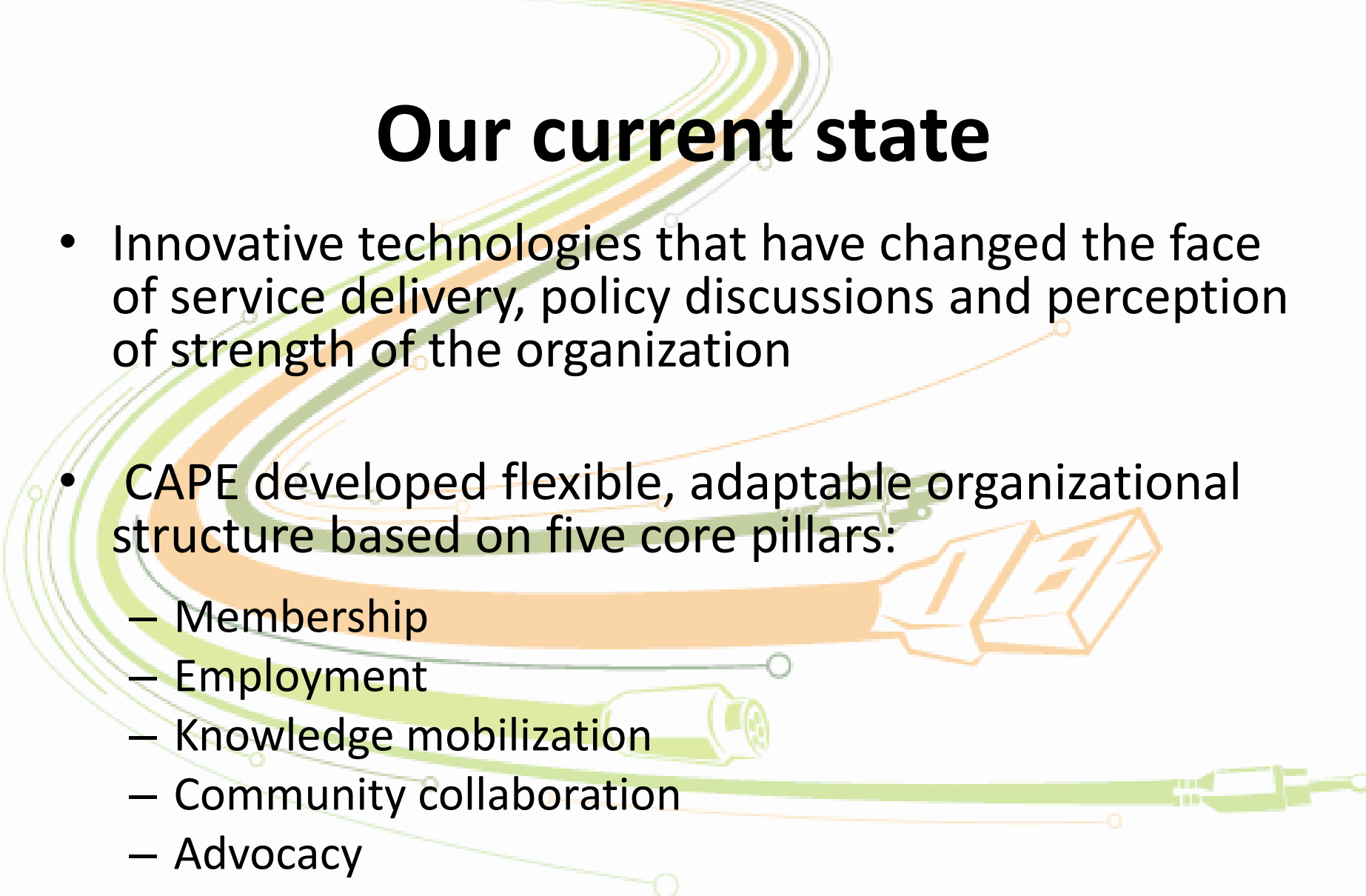
- Incorporated Independently
- Membership increased from 965 to 3000+
- Develop online employment support tools (Suite of 7 tools)
- Completed **Skills Commensurate Engineering Access (SCEA)** project - analyzed true gaps/skills - matched 1000+ IEBs with 400 + jobs (\$157,000+)
- Completed **Leveraging Global Engineering Skills (LGES)** project - curricula development process (\$505,000+)
- Engaged with 100+ employers
- Trained 400+ front line workers, 80+ service providers, 20+ job developers trained
- Established MPREP- Multi-Profession Roundtable on Employment and Policy (approx. 175+ members)

# CAPE Achievements – By 2011

- Increase in stakeholder engagement: 400%
- Increased membership to 3500+
- Total project funding: Over \$1.1 Million
- Revenue generation from fee-for-service tools: \$180,000
- Raised approx. \$335,000 in-kind contributions of services/volunteer hours
- Served/counseled approx. 550 people individually
- Put 30+ people on the path to sustainable employment through CAPE activities



# Our current state

- Innovative technologies that have changed the face of service delivery, policy discussions and perception of strength of the organization
  - CAPE developed flexible, adaptable organizational structure based on five core pillars:
    - Membership
    - Employment
    - Knowledge mobilization
    - Community collaboration
    - Advocacy
- 

# CAPE's Prospects

- CAPE's mission expansion, title change
- Organizational structure development
- Sustainability enhancement
- Milestone IMG Navigator Project with MTCU
- Profound shift to advocacy:
- Embracing legal Advice on Advocacy

# Petition to Government of Canada

The Government of Canada must ensure:

- The constituent elements of the twelve months Canadian experience requirement are **clearly and publicly documented**.
- An arms' length appeal process is introduced into the licensing process to ensure the rights of individuals to **seek justice, as their constitutional rights**, against accepted documented criteria.
- The governance of the regulated professions **does not restrict competition** and is aligned with the requirements laid out in free trade agreements (NAFTA and GATTs) that Canada has signed to reduce and/or **eliminate discrimination** in licensing processes, and ensure these are fair, objective, transparent, and no more burdensome than necessary.

# CAPE is Proud to Thank you

- Thanking our sponsors
- Thanking our outgoing members
- Thanking our activists
- Thanking all our loyal members for the support and active contribution to the case of recognition and establishment of foreign trained professionals in Canada



# Opening Remarks: Regulation under the 3<sup>rd</sup> Convergence

Dr. Gurmeet Bambrah, Chief  
Operating Officer, CAPE

# ICT – The First Digital Convergence

- Before **1970** Communications technology was built for telephony, telegraphy, and broadcasting.
- Between **1975-1995** computing and **communications converged producing** mass digitization - information entered cyberspace
- **1995-2005** Information and Communications technology converged producing ICT frontier
  - ICT is the use of computers to upload, convert, store, protect, transmit, process, and securely retrieve data

# The Second Convergence- Nano to Mega

- **1990s** Digital systems started removing technological and disciplinary boundaries in 1990s
  - emergence of **biotechnology, nanotechnology and systems thinking**
- **2005** Charles West Professor Emeritus, MIT argued two frontiers were emerging in Engineering
  - The **Bio-Nano-Info Frontier** – smaller and smaller spatial scales and faster and faster time scales
  - The **Mega Systems Frontier** of larger and larger global systems of great complexity
- **January 2011** Dr. Abdul Kalam - **that another frontier is emerging in engineering**
  - As globally demand is shifting to technologically and environmentally superior and sustainable systems
  - **Bio-Nano-Info-Eco - the new 21<sup>st</sup> Century Frontier calling for innovative knowledge platforms**

# NBIC – Third Convergence 2020

- **NBIC** acronym for **Nanotechnology, Biotechnology, Information Technology and Cognitive Science**
- **NBIC** convergence is a bioscience industry
  - Based on radically new abilities to manipulate matter at the **atomic and nano** levels.
  - Driving human progress in powerful ways.
  - This triad of technologies is expected to provide unprecedented benefits and solutions to the future grand challenges facing humanity **ranging from sustainable health care and energy independence to food, water and climate.**

**NBIC is becoming the blueprint for innovation**



# Convergence and Engineering

- **First Convergence 1990s** - ICT became an integral part of all engineering activities
- **Second Convergence 2000s** - The 21<sup>st</sup> century knowledge society, where science and environment got together created **Bio-Nano-Info-Eco Frontier and Mega systems Frontiers in engineering**
- **Third Convergence 2010s** - NBIC leading to
  - “...emergence of new kinds of **people who understand multiple fields in depth and intelligently work to integrate them,**”  
Bainbridge of US National Science Foundation
  - Requires **highly interdisciplinary teams characterized by broad intellectual span rather than focused practice within the narrow traditional engineering disciplines.** James J. Duderstadt, President Emeritus, University of Michigan argues

# Diverging Public Requirements

**Regulation**

**and**

**Convergence**

self -  
governing  
and highly  
protective

Rigid (inflexible)  
Institutional Structures  
focus licensing for  
control of practitioners

More and more narrowly  
defined engineering disciplines  
and tasks

Fading disciplinary and  
professional boundaries  
Bio-Nano-Info-Eco - cognitive  
science

Collaborative ,  
innovative and flexible  
Institutional Structure s

Non-profession  
specific but  
ethical  
Regulation



## Expert Panel 1

# Nano to Mega: Engineering and Convergence 2020

Robotics: Research, Business, and Foresight

**Dr. Andrew Goldenberg**

Ontario Green Energy and Green Economy Act, the  
FIT Program and Renewable Electricity Production,

**Dr. Michael Dang, Hydro One**

Energy Independence and sustainability,

**Dr. Sergy Kasyanov, Independent Consultant**

Environmental Sustainability and management,

**Dr. Shashi Vohora, Independent Consultant**



## Sponsor Appreciation



Partners in Powerful Communities

INTERSTAFF INC.  
Corporate sponsor,  
Career Opportunities  
and Financial Services



# Robotics, Research, Business and Foresight

Dr. Andrew Goldenberg



# Ontario Renewable Energy Program

Dr. Michael Dang, Hydro One



## Quick Facts

- Ontario has already brought more than 1,200 MW of new renewable energy on-line since October 2000
- Earlier initiatives included plans to eliminate coal from the power supply as this is the single largest source of air pollution in Ontario and eliminating it from the transmission network system will be the largest climate change initiative



# **The Green Energy Act**

**Ontario's Green Energy Act (GEA) received the Royal Assent on May 14, 2009. Regulations and other tools needed to fully implement the legislation were introduced through the month of September 2009. The landmark in Green Energy Act:**

- Boost investment in renewable energy projects and increase conservation**
- Spark growth in clean and renewable sources of energy such as wind, solar, hydro, biomass and biogas in Ontario**
- Create the potential for savings and better managed household energy expenditures through a series of conservation measures**
- Create green jobs and economic growth to Ontario.**



# Ontario's Electricity Market (Continued)

## Ontario's Electricity Market

ONTARIO **POWER**  
GENERATION



hydro   
**one**

ontario  
electricity  
financial  
corporation

 **ieso**  
Power to Ontario. On Demand.

**OPA**  
Ontario Power Authority

# Ontario's Electricity Market (Continued)



**Ontario's Electricity Market (Continued)**



**Direct operations and maintain reliability of grid and operate the market**



**Own and operate transmission and distribution systems**



**Own and operate generation facilities**

Ontario Power Authority

**Forecast system requirements in an integrated plan**



**Managing Ontario Hydro debt**



**Prescribing, inspecting, testing and approving electric equipment**

# Ontario's Electricity Market (Continued)



**Ontario Energy Board regulates Ontario's electricity industry**



**Local Distribution Companies provide electricity to local customers**

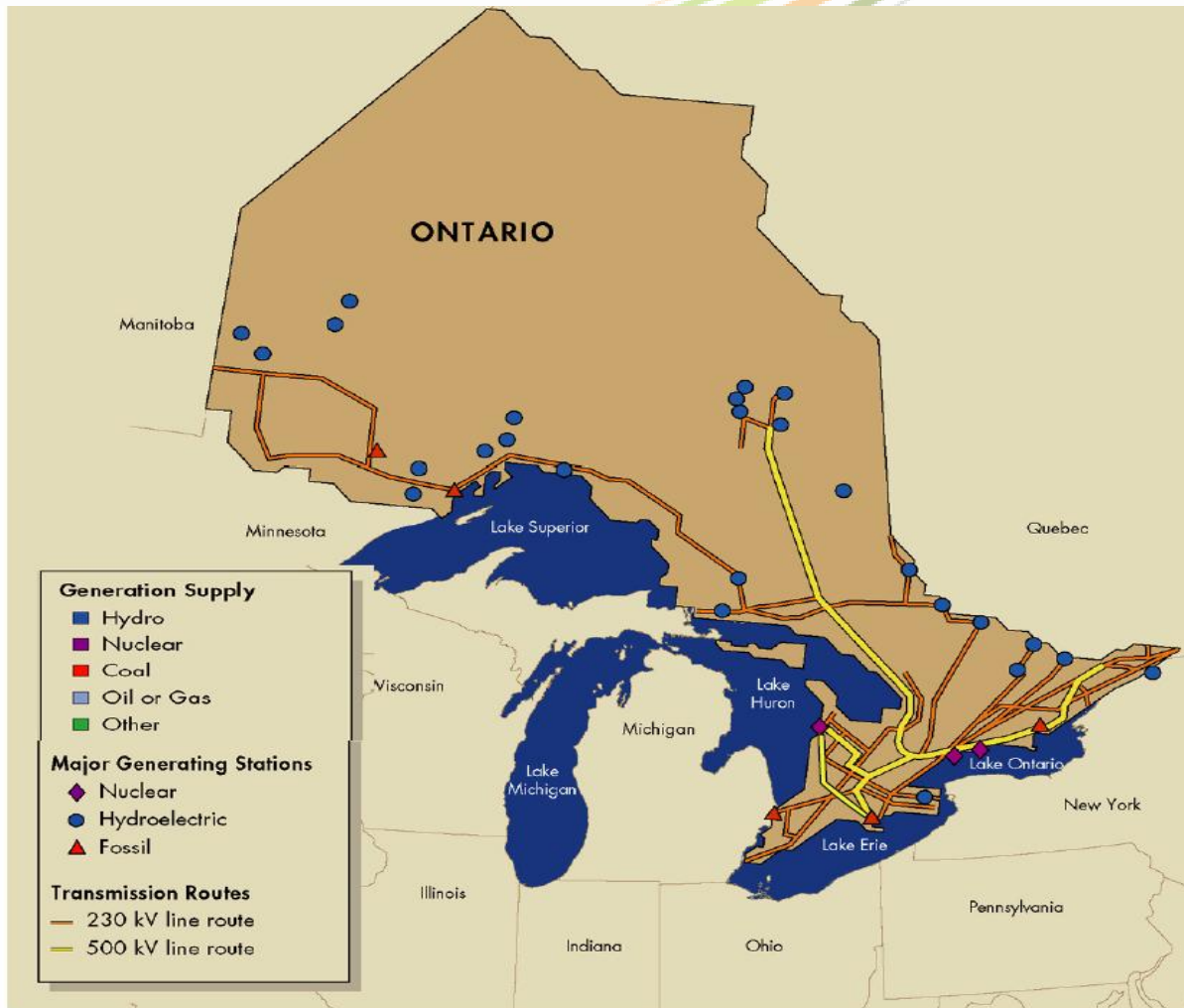


**Private generators provide electricity production**

**Consuming customers**



# Ontario's Electricity Market (Continued)



## The Network System

### Transmission

#### Stations

281

#### Transmission Lines

500kV - 3784km

230kV - 13824km

115kV - 10953km

#### Distribution Lines

123,000 km

#### Underground Cable

230kV - 45km

115kV - 220km

#### Customers

1.2 Million Customers

Large Industrials - 113

Local Distributors - 92

#### Generators

174 (includes 78 OPG)

#### 2011 Peak Demand

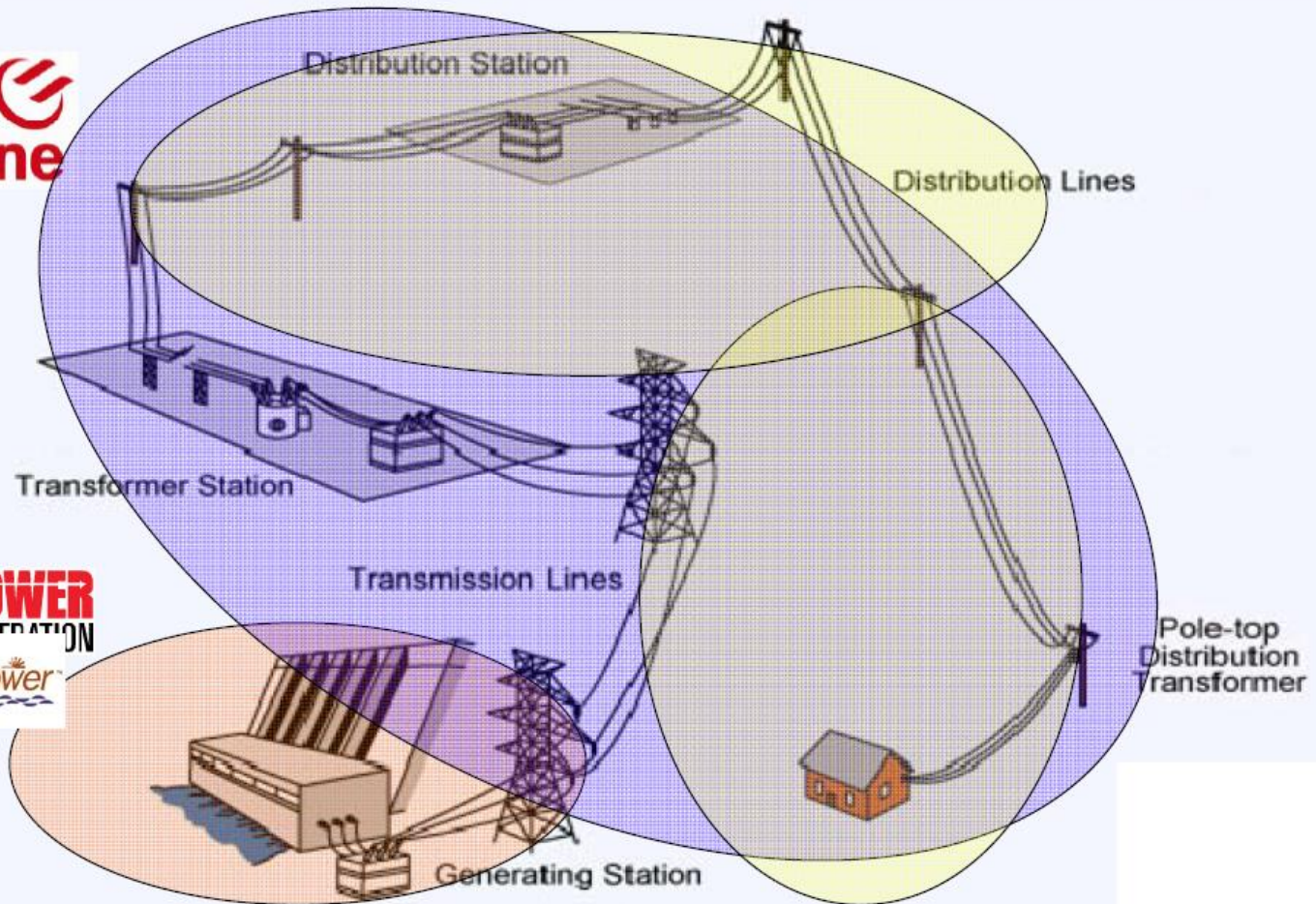
27,005 MW

# Electricity System Overview

hydro  
one






ONTARIO  
POWER  
GENERATION

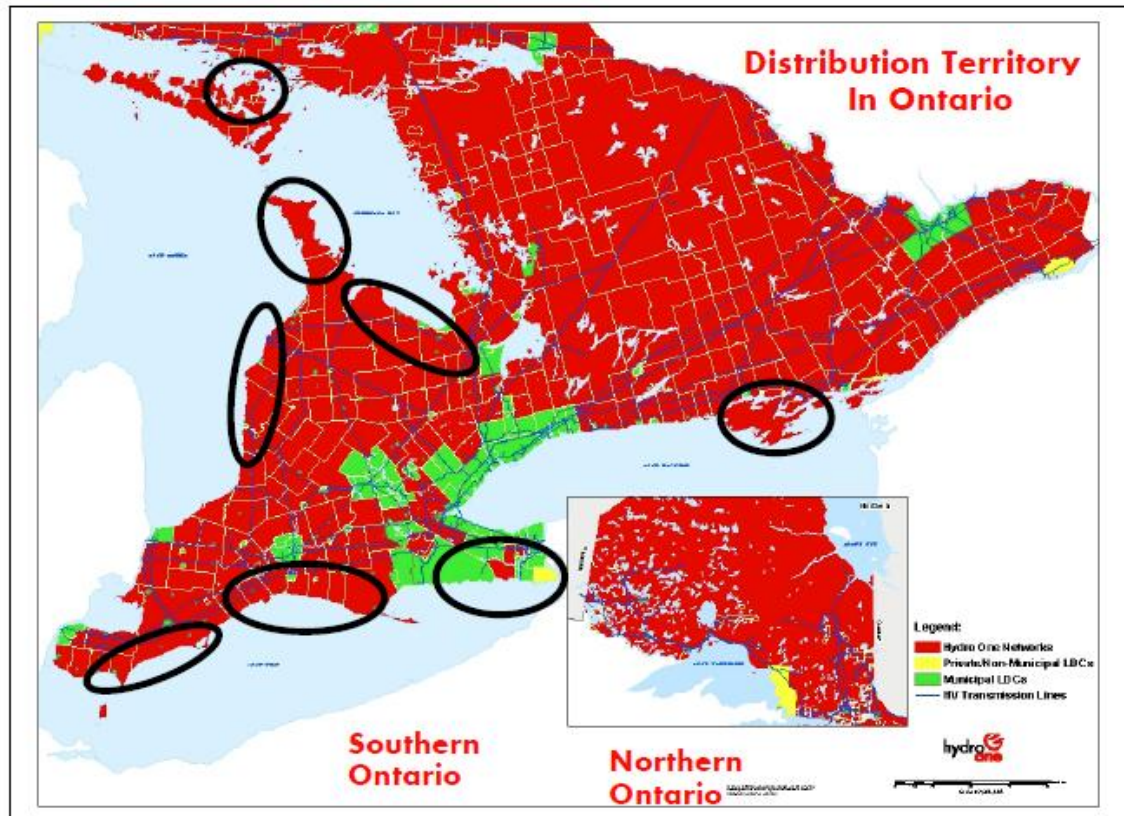
Bruce Power





# Greene Energy Contracts

Delivery by Date and Technology Type for OPA Managed Contracts							Total
		Prior	2011 Planned	2012 Planned	2013 Planned	2014 Planned	
	Wind	1527.1	833.4	497.6	1089.4	300	4247.5
	Hydroelectric	28.2		14	507.3	54.85	604.35
	Biomass, Landfill and Industrial By-Product Gas	55.3	15	17.8			88.1
	Natural Gas	4153.9		673			4826.9
	Bruce Refurbishment			1500			1500
	<b>Total</b>	<b>5764.5</b>	<b>848.4</b>	<b>2702.4</b>	<b>1596.7</b>	<b>354.85</b>	<b>11,266.85</b>



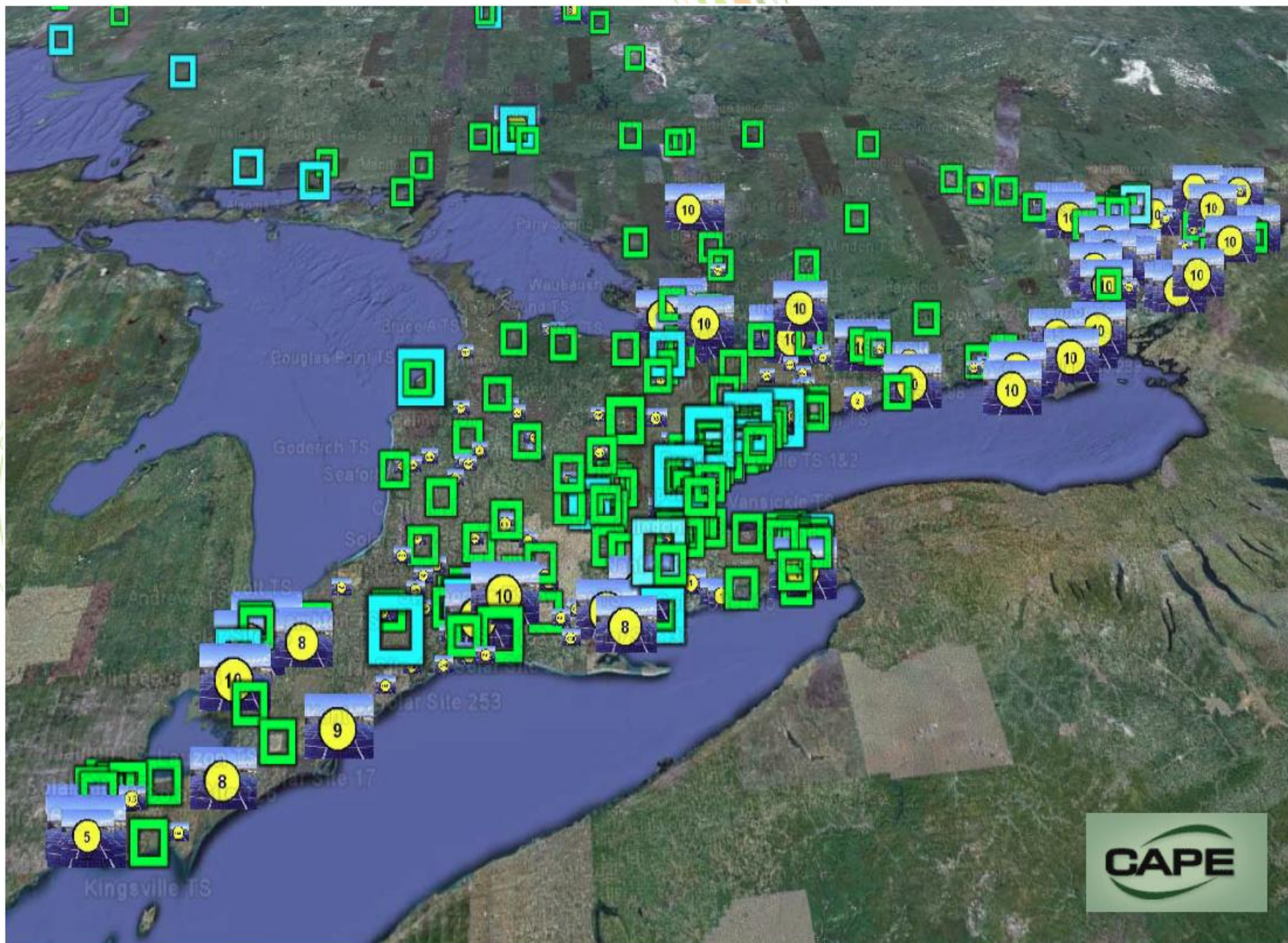
- **Wind Potential • Southern Georgian Bay (Owen Sound, Collingwood) • Bruce Peninsula North (tip of Lake Huron and Georgian Bay) • Lake Huron shore (Goderich, Port Albert, Kingcardine, Douglas Point, Port Elgin) • South shore on Lake Erie (Leamington, Port Stanley, Port Burwell,**
- East of Nanticoke to Port Coleborne) • Prince Edward County - Southeastern area • Manitoulin Island**



## Map of Ontario(2008)







# FIT Prices for Renewable Energy Projects in Ontario

Feed-in Tariff Prices August 13, 2010		
Renewable Fuel	Size Transaction	Contract Price Cents/kWh
Biomass	$\leq 10$ MW	13.8
	$> 10$ MW	13.0
Biogas		
• On-Farm	$\leq 100$ kW	19.5
• On-Farm	$> 100$ kW $\leq 250$ kW	18.5
• Biogas	$\leq 500$ kW	16.0
• Biogas	$> 500$ kW $\leq 10$ MW	14.7
• Biogas	$> 10$ MW	10.4
Landfill Gas	$\leq 10$ MW	11.1
	$> 10$ MW	10.3
Waterpower	$\leq 10$ MW	13.1
	$> 10$ MW $\leq 50$ MW	12.2
Solar PV		
• Rooftop	$\leq 10$ kW	80.2
• Rooftop	$> 10$ kW $\leq 250$ kW	71.3
• Rooftop	$> 250$ kW $\leq 500$ kW	63.5
• Rooftop	$> 500$ kW	53.9
• Ground Mounted	$\leq 10$ kW	64.2
• Ground Mounted	$> 10$ kW $\leq 10$ MW	44.3
Wind		
• Onshore	Any size	13.5
• Offshore	Any size	19.0

# FIT Prices for Renewable Energy Projects in Ontario (Cont...)

<i>Feed-in Tariff Price to be Added to Aboriginal and Community Projects</i> <i>Cents/kWh</i>						
<i>Renewable Fuel</i>	<i>Wind</i>	<i>PV (Grd Mt)</i>	<i>Water</i>	<i>Biogas</i>	<i>Biomass</i>	<i>Landfill Gas</i>
Max Price to be added to Aboriginal Projects	1.5	1.5	0.9	0.6	0.6	0.6
Max Price to be added to Community Projects	1.0	1.0	0.6	0.4	0.4	0.4





The GTAA cogeneration plant near the Toronto airport is the first natural gas-fired facility under contract with the OPA placed in commercial operation. The project consists of two GE LM6000 combustion turbine generator sets.



A bird's eye view of the 99 MW Erie Shores Wind Farm at Port Burwell. The project, which was developed by Erie Shores Wind Farm LP and placed in commercial operation in May 2006, is comprised of 66 GE wind turbines.

Other than wind and hydroelectric, there are three biomass and landfill gas projects that contribute 9.1 MW of the renewable energy supply capacity to the Ontario electricity system. As of the end of January 2007, all of these contracts have been placed in commercial operation.

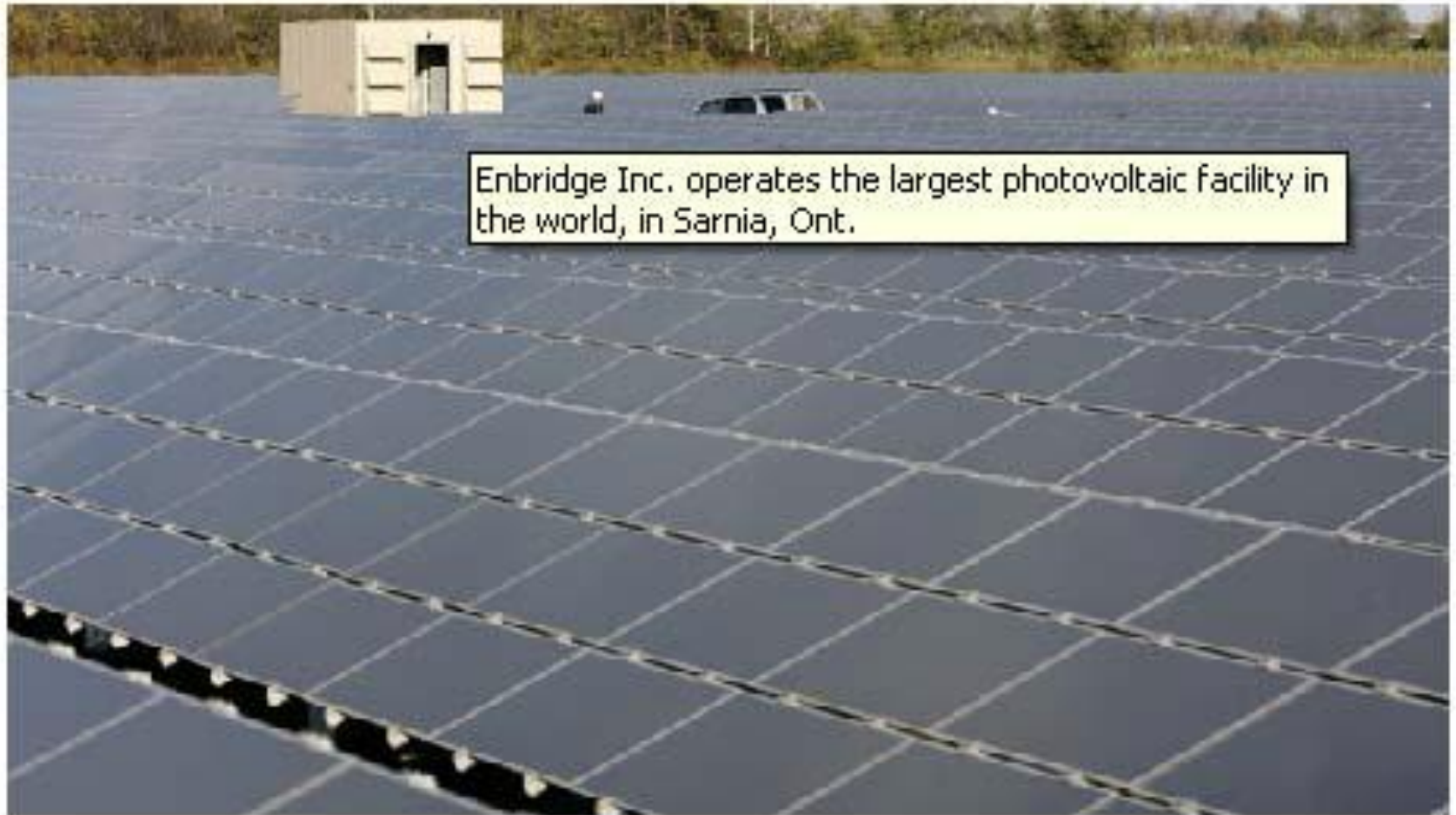


This 2.8 MW biomass generating facility located in Guelph was placed in commercial operation in August 2005. The project was developed by Ecotricity Hydro Inc., a subsidiary of Guelph Hydro Inc. It is the first OPA electricity supply contract that achieved commercial operation. This facility uses three Caterpillar Model G3516 SITA spark-ignited, low-emission engines.





This 1.6 MW digester gas generating facility in Hamilton is the smallest OPA-contracted facility. The project, which was placed in commercial operation in July 2006, was developed by Hamilton Renewable Power Inc., a subsidiary of the City of Hamilton.



Enbridge Inc. operates the largest photovoltaic facility in the world, in Sarnia, Ont.

**The world's largest photovoltaic facility in the world in Sarnia.  
Enbridge's 80 MW solar farm consists of 1.3 million solar modules  
across 943,000 square meters**





**The Ontario microFIT solar program allows Ontarian to install a solar PV Array of 10KW or less. Under the program you are paid a guaranteed ¢80.2/kWh for a system mounted on an existing roof. This is over a 20-year term to the province's electricity grid.**



**10 kW Ground-mounted solar panels showing single-axis azimuth tracker designed to boost output by up to 25% by following the sun from east to west over the course of the day. Under the FIT program you are guaranteed €64.2/kWh over a 20-year period.**



# BRICS – Energy Independence and Sustainability (BRIC vs G6)

Dr. Sergy Kasyanov, Independent Consultant

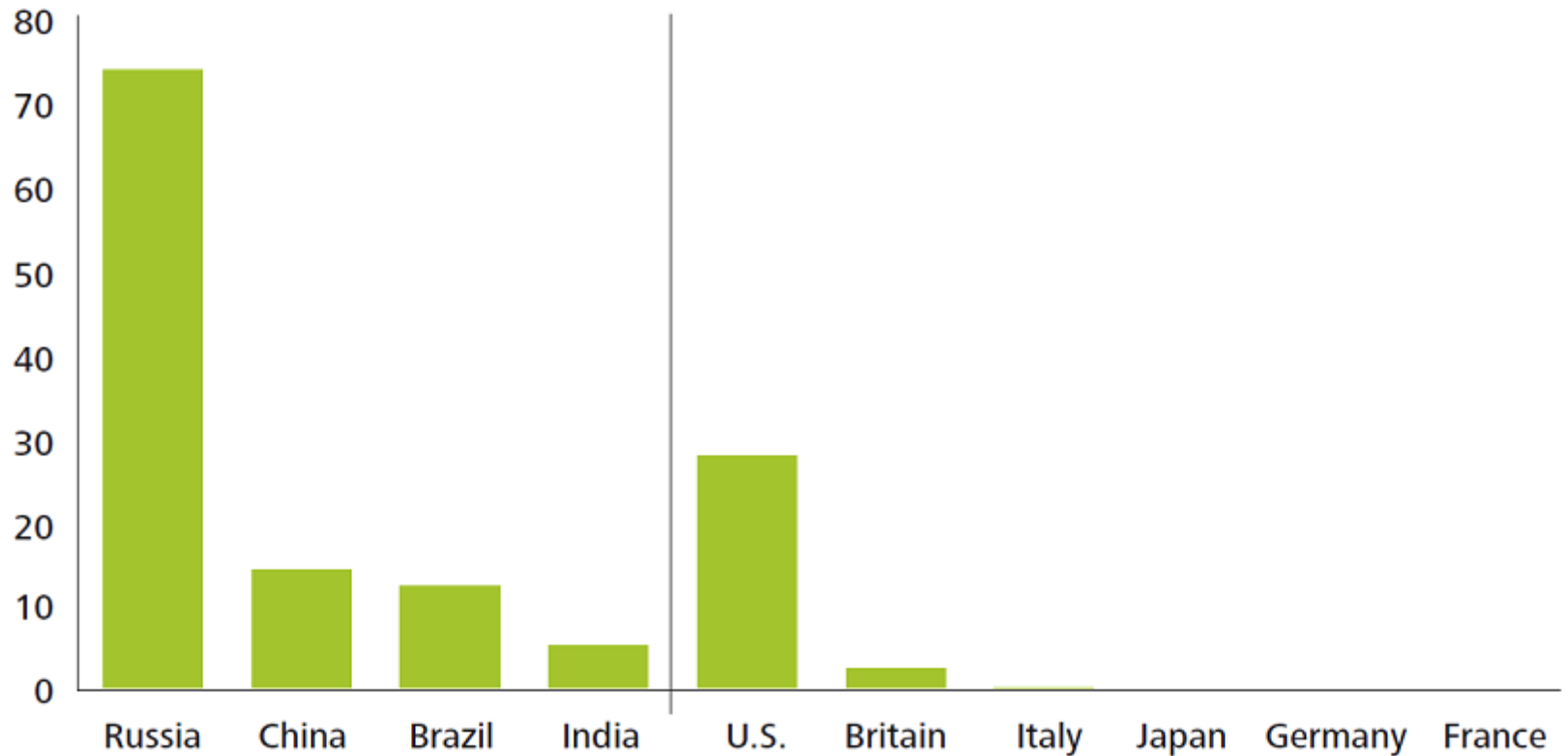
# GLOBAL ENERGY MARKETS

Term “BRIC” was introduced by Goldman Sachs for Brazil, Russia, India and China, developing/transitioning countries, which were projected to drive global economic growth.

At the opposite side we have G6 group of the most developed countries: United States, Japan, Germany, France, UK and Italy.

Will BRIC outpace G6??

# Proved oil reserves, billions of barrels





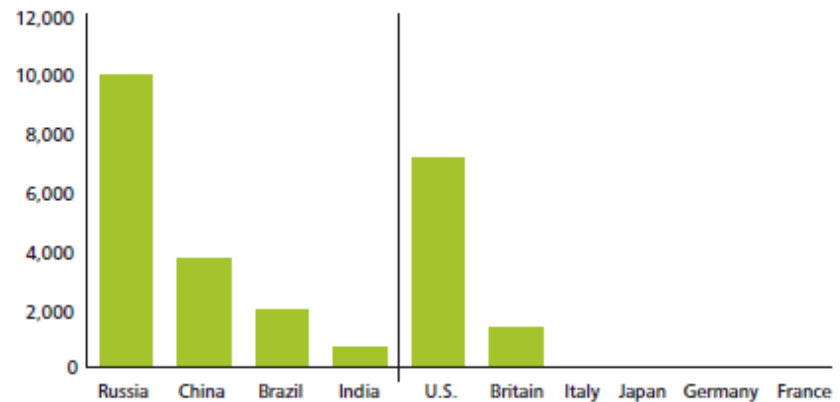
## Oil production and consumption

BRIC countries have by far larger proved oil reserves over G6 (115 and 35 billions barrels respectively) as well as larger scope of production.

But G6 bloc traditionally has much larger consumption of it.

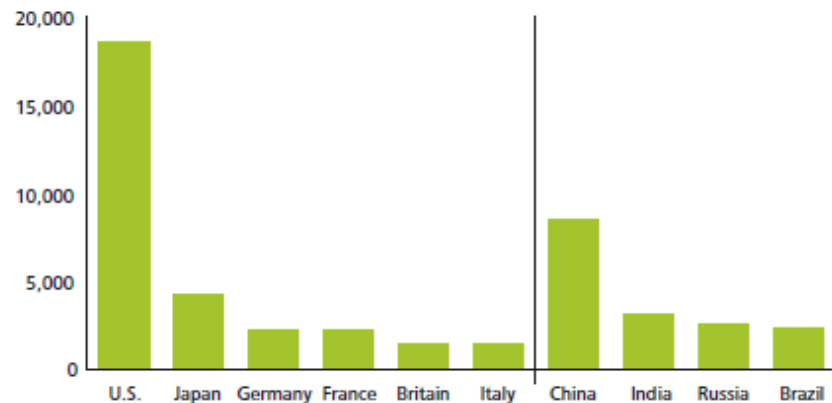
Oil production

(thousand barrels per day)



Oil consumption

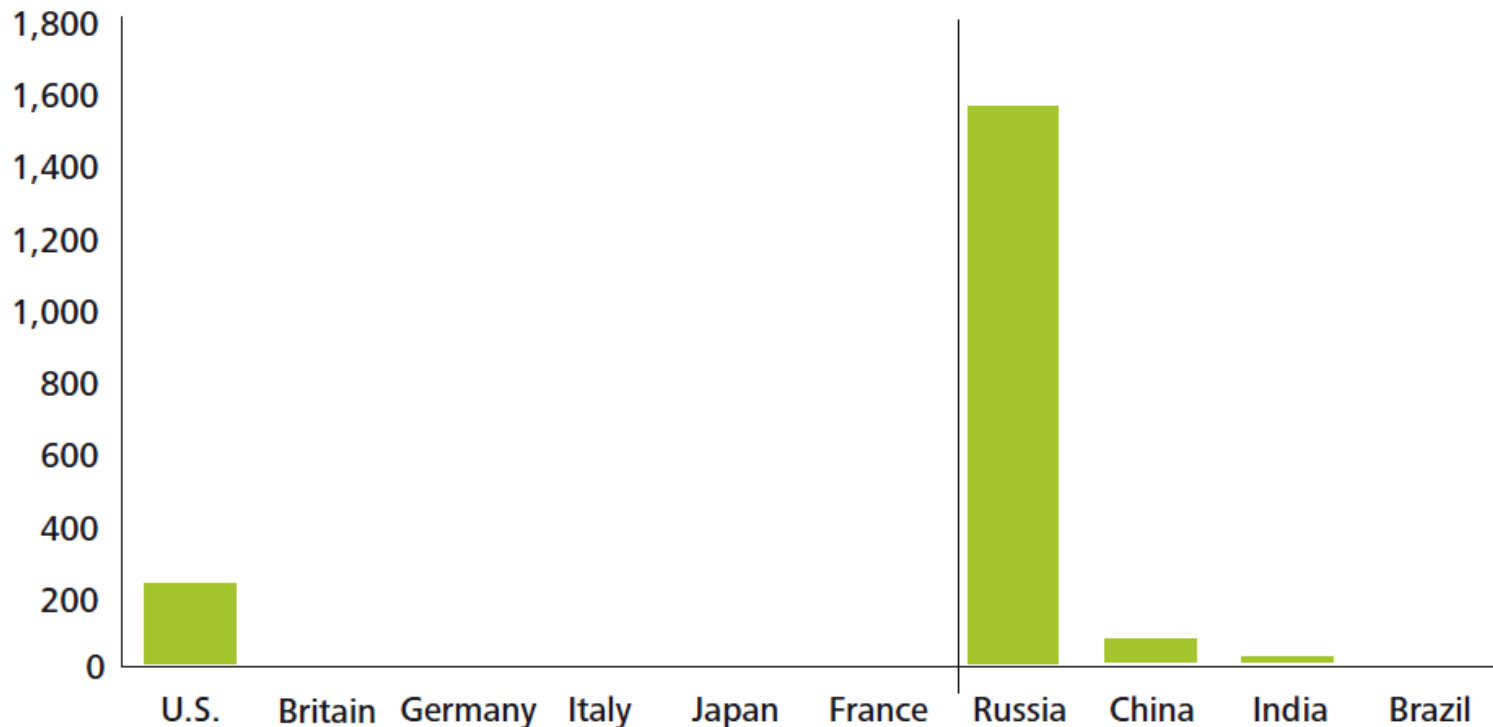
(thousand barrels per day)



# Natural gas reserves are dominated by Russia, but G6 is winning in its production and consumption

Natural gas proved reserves

(trillion cubic feet)

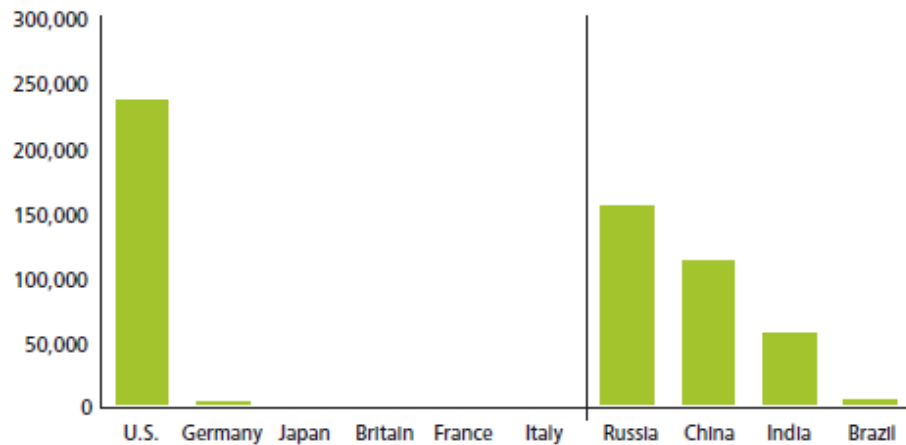


**Coal represents a major part of many countries' energy mix**

BRIC countries are increasingly becoming the major hubs of hydrocarbon reserves, production and consumption. They will further attract capital for the development and financing of new energy supply infrastructure.

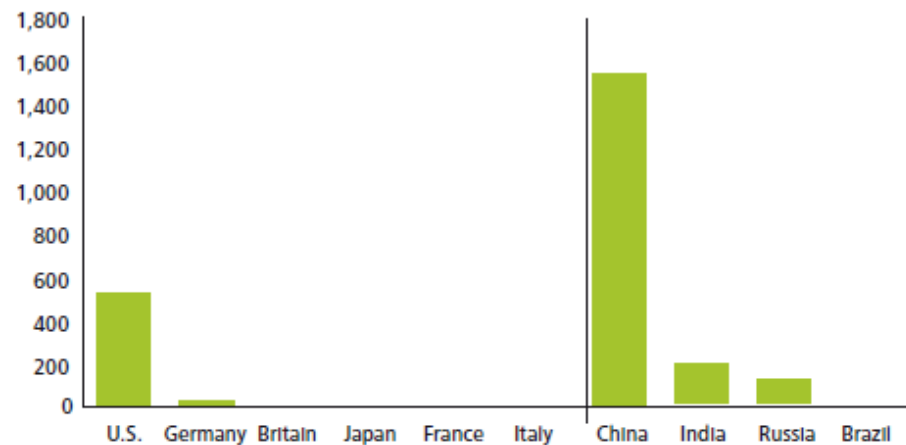
Coal proved reserves

(million tonnes)



Coal production

(million tonnes of oil equivalent)





# Non-fossil sources of energy

Fossil fuels are not environmentally friendly, finite and will be exhausted within several generations. Therefore renewable energy becomes the bare necessity for the sustainable development of mankind:

- Hydroelectricity production must be reconciled with environmental and agricultural challenges
- Nuclear energy should become increasingly safe
- Production of biofuels must be dramatically increased
- Windmills, geothermal, sea-, sunpower and other renewable energy supplies should become more efficient and popular.



# Environmental Sustainability and Management

Dr. Shashi Vohora, Independent Consultant



# SUSTAINABILITY

An abstract graphic featuring several thick, curved lines in shades of green and orange. These lines sweep across the frame, with some ending in stylized cable connectors. One connector is a three-prong electrical plug, and another is a multi-pin connector. Small circles are placed along the lines, some with thin lines extending from them, suggesting a network or data flow. The overall aesthetic is clean and modern, with a focus on the colors of sustainability.

Impact of the revolution  
a revolution in the making

# Important Revolutions

The graphic features a list of eight revolutions on the left. Colored lines (green, orange, and grey) originate from each item and curve across the slide to connect with different types of cable connectors on the right. The connectors include a three-prong electrical plug, a USB-A connector, a D-sub connector, and an Ethernet RJ45 connector. The background is white with faint, curved lines in the colors of the connectors.

- ***Agricultural Revolution*** notable

- ***Industrial Revolution***

- ***Manufacturing Revolution***

- **Transportation Revolution**

- **Standardization Revolution**

- Quality Revolution recent

- IT Revolution

- **Globalization Revolution**

- **Automation Revolution**

An abstract graphic featuring several thick, curved lines in shades of green and orange that sweep across the frame. Interspersed among these lines are various cable connectors, including a three-prong electrical plug, a USB-A connector, and a circular multi-pin connector. Small circles at the end of thin lines suggest a network or data flow theme.

# what do we mean by SUSTAINABILITY

In everyday English sustain, *means "to maintain", "to support", or "to endure"*.

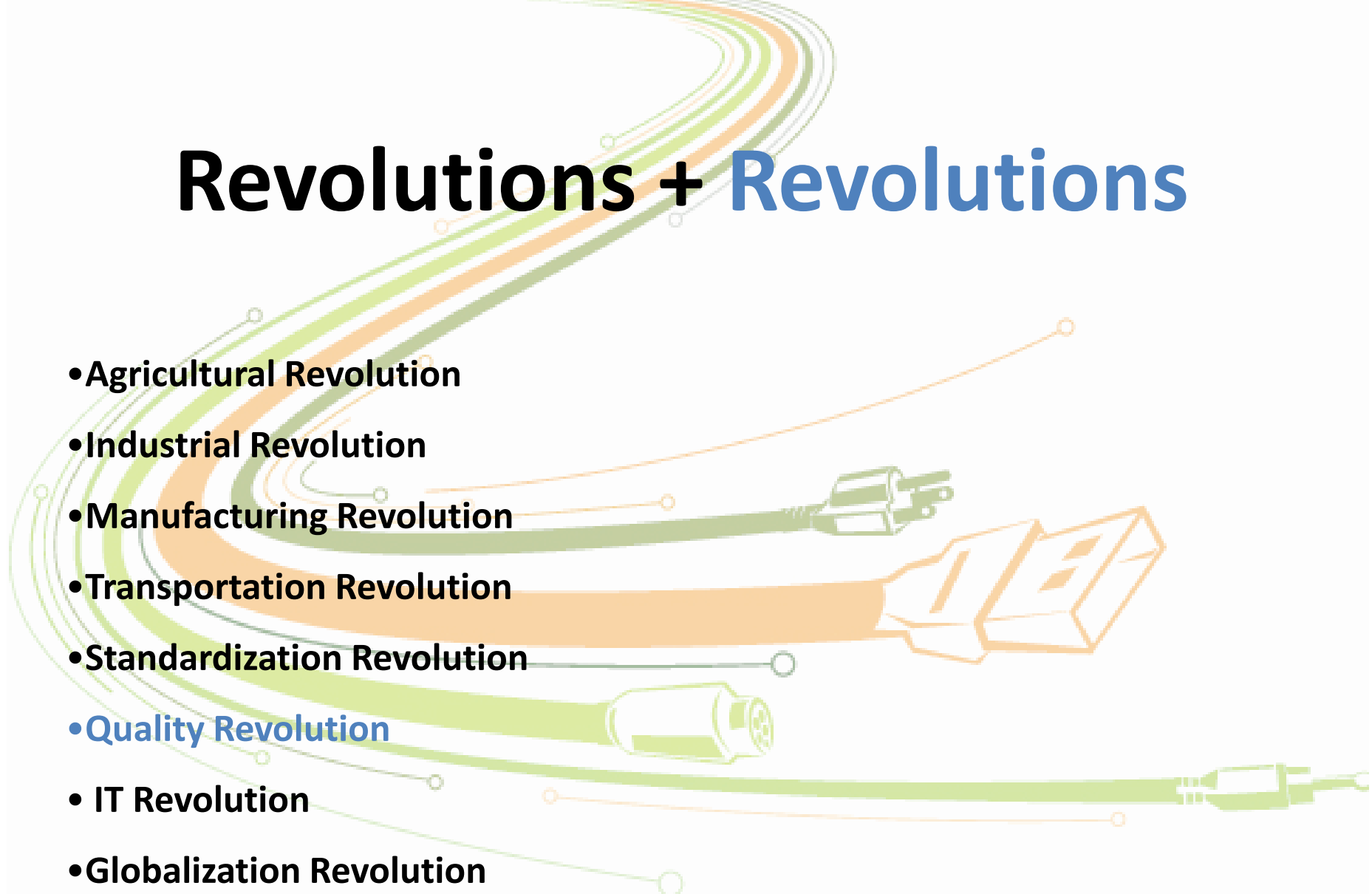
# **SUSTAINABILITY REVOLUTION**

An abstract graphic featuring several thick, wavy lines in shades of green and orange that curve across the frame. Interspersed among these lines are various cable connectors, including a green multi-pin connector, an orange USB-A plug, and a green RJ45 Ethernet plug. Thin lines with small circular nodes also weave through the composition, creating a sense of digital connectivity and flow.

**likely to be as or more significant  
than the  
Quality Revolution**

# Revolutions + Revolutions

- Agricultural Revolution
- Industrial Revolution
- Manufacturing Revolution
- Transportation Revolution
- Standardization Revolution
- Quality Revolution
- IT Revolution
- Globalization Revolution
- Automation Revolution





# Quality Revolution



**Product Reliability**

**particularly for consumers**

# Built on the idea of **Continuous Improvement**

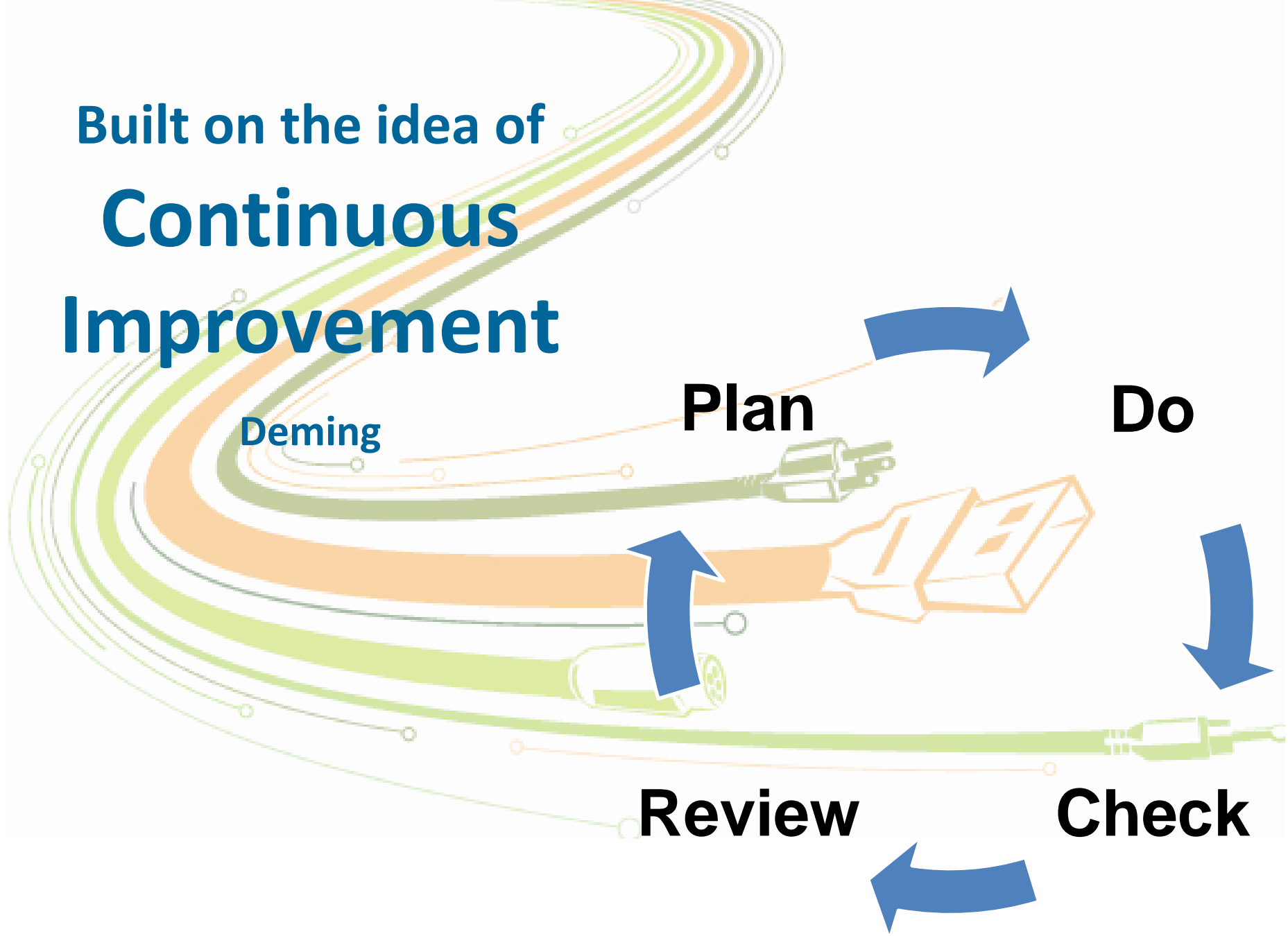
Deming

**Plan**

**Do**

**Review**

**Check**





# **Quality and Sustainability**

**Quality satisfies practical needs**

**Sustainability satisfies emotional needs**

**Both based on Continuous Improvement Cycle**

# Benefits of Sustainability

An abstract graphic featuring several thick, wavy lines in shades of green and orange that curve across the slide. A power plug icon is positioned near the center, with lines extending from it towards the text elements.

## Containment of

- depletion
- degradation
- destruction

An abstract graphic featuring several wavy, concentric lines in shades of green and orange. These lines curve around the central text. At the end of one of the orange lines is a green power plug connector. Another orange line ends in a white USB-A connector. A green line further down ends in a green RJ45 network connector. Small circles are placed at various points along the wavy lines.

# Importance of being SUSTAINABLE

- customers expect it
- public authorities demand it

**Sustainability is important along the entire continuum from nano to mega technology.**

# SUSTAINABILITY IN PRACTICE

An abstract graphic featuring several thick, curved lines in shades of green and orange that sweep across the frame. Interspersed among these lines are various cable connectors, including a three-prong electrical plug, a USB-A connector, a circular multi-pin connector, and an RJ45 Ethernet connector. Thin lines with small circular endpoints connect these connectors to the main graphic elements.

based on managing the environmental impacts of industrial activity

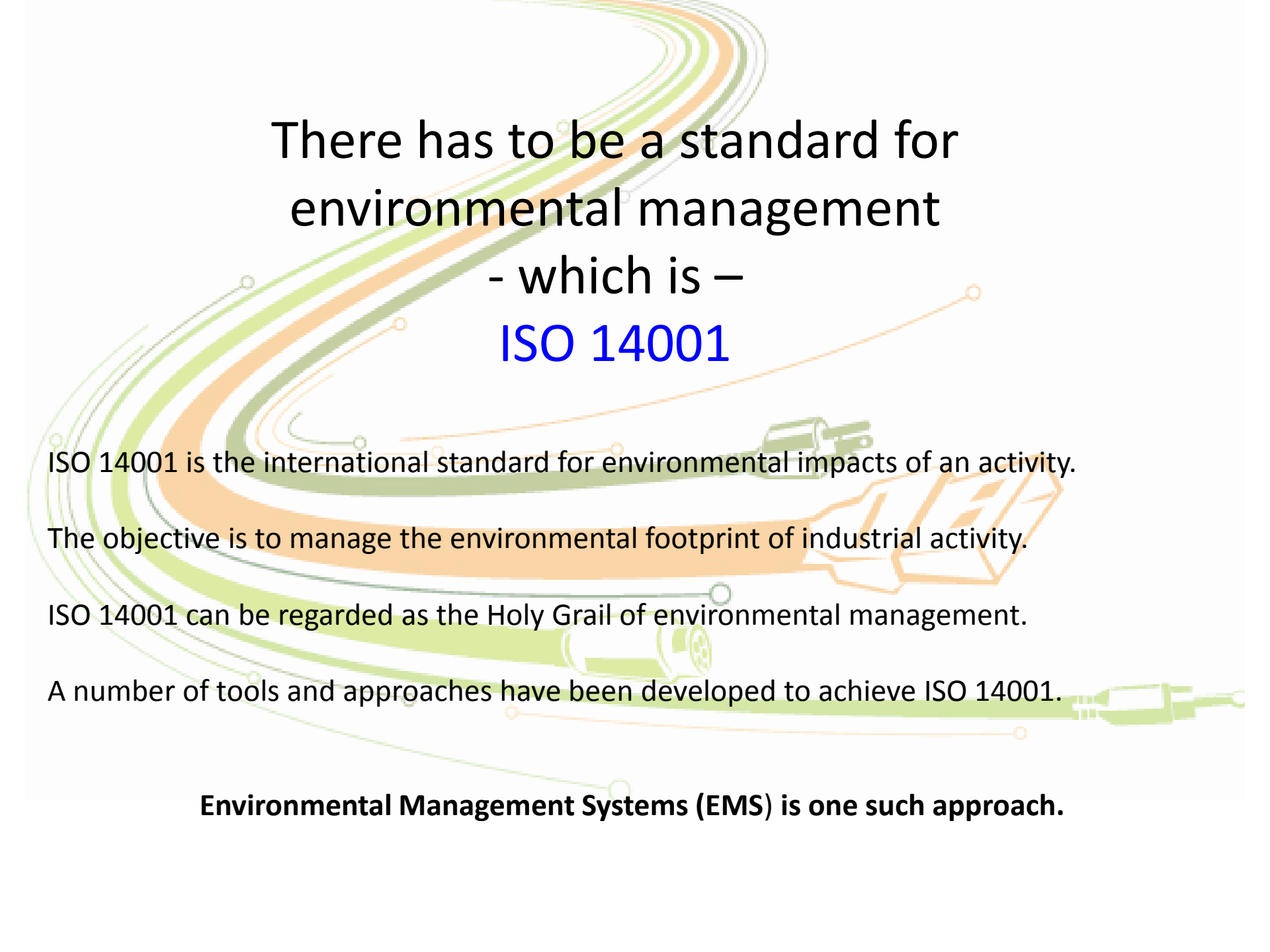


# Environmental Management

Managing the environmental impacts of industrial and other activities.

A way to attain sustainability is to adopt the practice of environmental management





# There has to be a standard for environmental management - which is – **ISO 14001**

ISO 14001 is the international standard for environmental impacts of an activity.

The objective is to manage the environmental footprint of industrial activity.

ISO 14001 can be regarded as the Holy Grail of environmental management.

A number of tools and approaches have been developed to achieve ISO 14001.

**Environmental Management Systems (EMS) is one such approach.**



# Environmental Management Systems

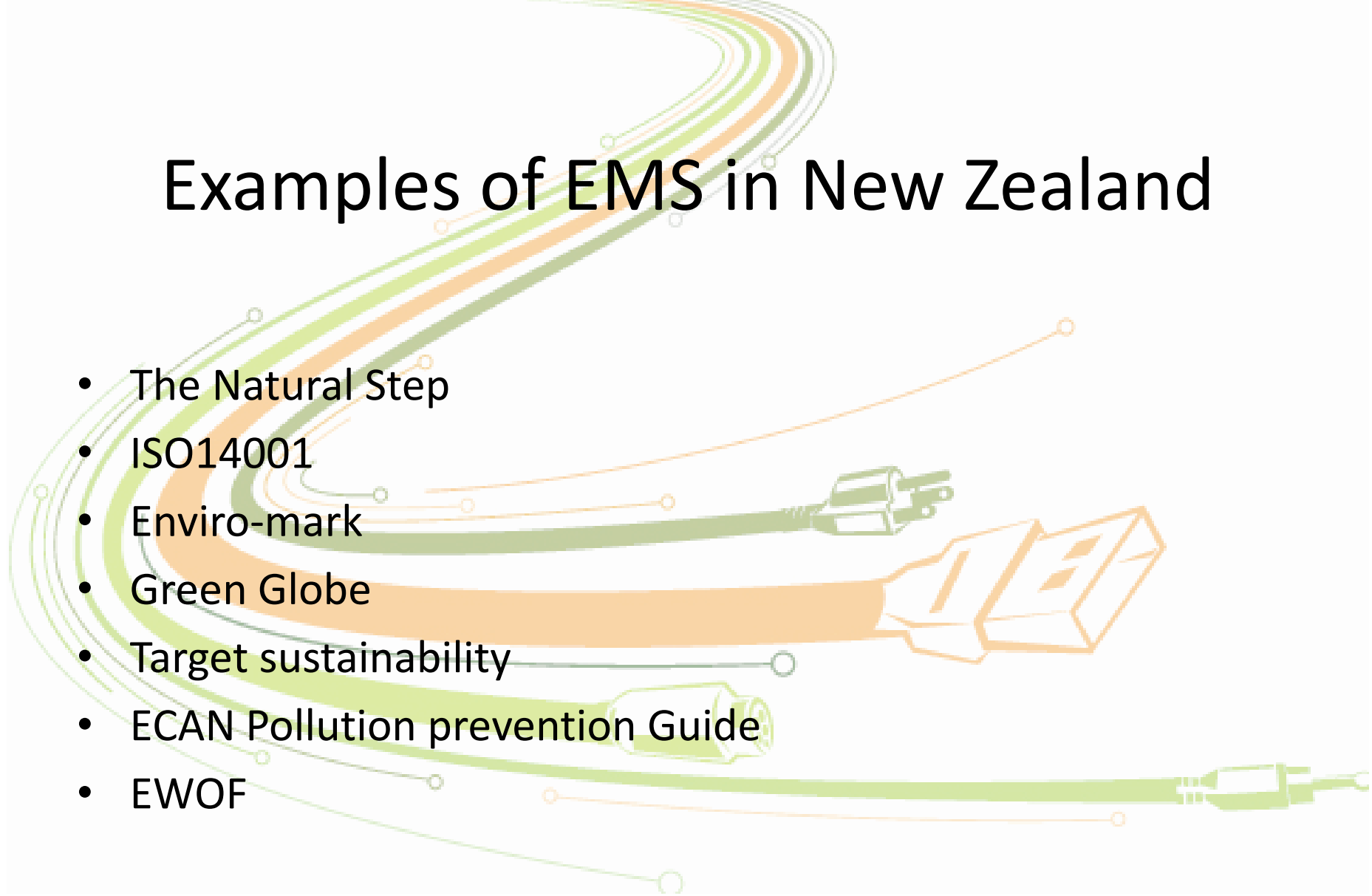
An Environmental Management System (EMS) is a systematic tool or framework to manage environmental impacts.

An EMS helps to integrate environmental issues and responsibilities into the day to day activities of an organization

my personal Involvement

# Examples of EMS in New Zealand

- The Natural Step
- ISO14001
- Enviro-mark
- Green Globe
- Target sustainability
- ECAN Pollution prevention Guide
- EWOF



# Why do firms get involved in environmental management

From my experience in NZ businesses start an EMS because

- Customer requirement (contract)
- Firms want to reduce operational impacts which also reduced costs
- Firms want to streamline manufacturing process and reduce raw materials and waste
- Firms want to minimize risk (prosecution and reputational risk)
- Marketing



# Evaluation of a selected EMS in real-life application

(involved 3 parts)-based on comparative research and case studies

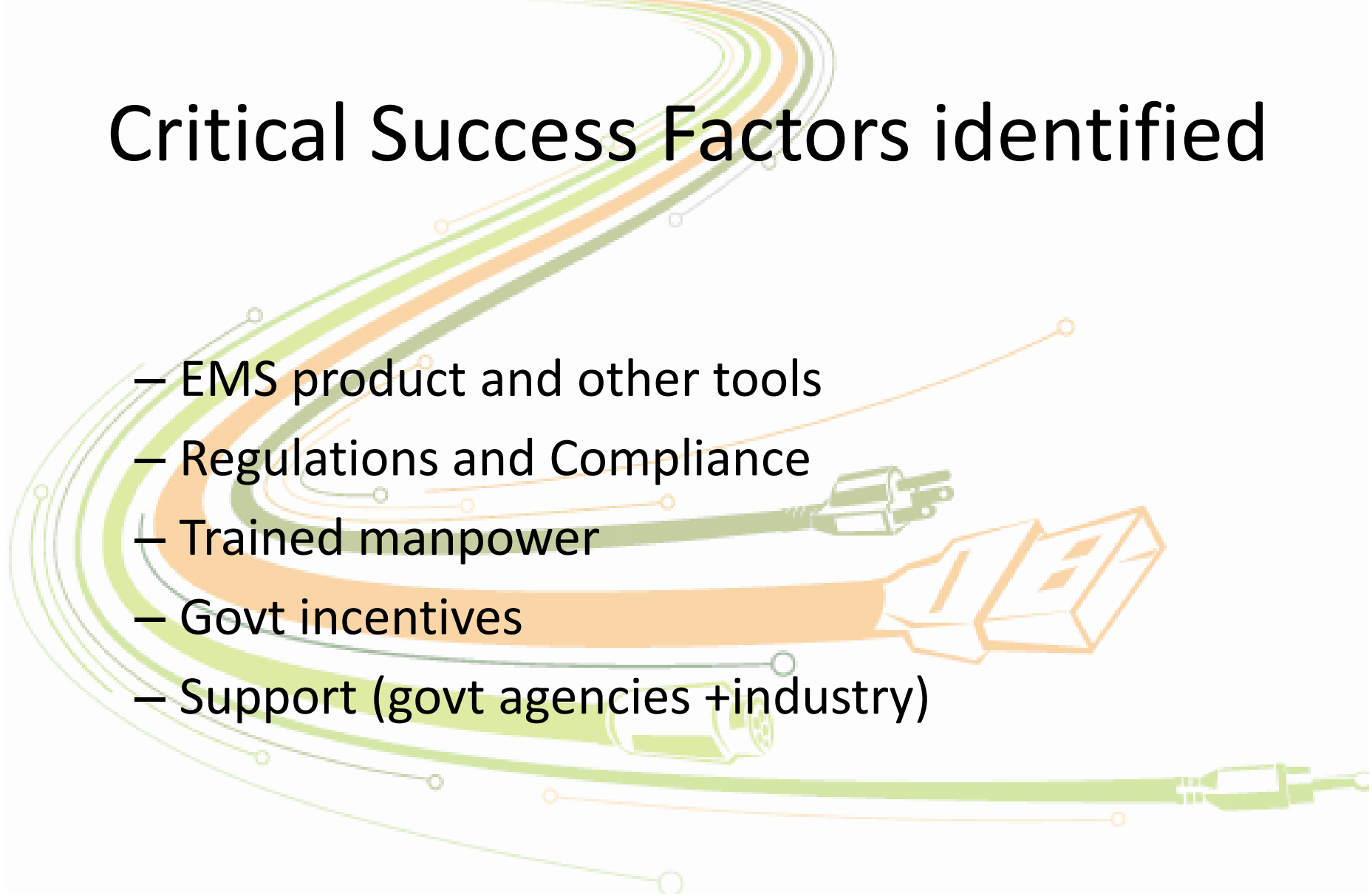
Firstly I compared EMS operation in Britain with New Zealand. This allowed me to gather information on critical factors for EMS

This was followed by

- Inter-sector comparisons (New Zealand)
- Inter-firm comparisons (plastics industry in New Zealand)
- case studies in selected firms

# Critical Success Factors identified

- EMS product and other tools
- Regulations and Compliance
- Trained manpower
- Govt incentives
- Support (govt agencies + industry)





# Inter-Sector Comparisons

An abstract graphic featuring several thick, wavy lines in shades of green and orange that curve across the slide. Small circles at the ends of these lines are connected by thin lines to various cable connectors, including a power plug, a USB-A connector, and a network RJ45 connector, which are positioned around the text.

**Within NZ comparing the plastics sector with non-plastic sectors suggested that facilitation is of crucial importance**

Why plastics?



# Inter-Firm Comparisons

**Firms within the plastics industry had different needs. This required the development of different responses to address firm-specific needs.**

**Facilitation has to be customized to specific needs of firms.**

An abstract graphic featuring several thick, curved lines in shades of green and orange. These lines sweep across the frame, with some ending in stylized cable connectors. One connector is a three-prong electrical plug, another is a USB-A connector, and a third is a circular multi-pin connector. Thin, light-colored lines with small circles at their ends trail off from the main colored lines, suggesting a network or data flow.

# FACILITATION

Making easier or less difficult or more achievable

An abstract graphic featuring several thick, curved lines in shades of green and orange that sweep across the slide. Interspersed among these lines are various cable connectors, including a three-prong electrical plug, a USB-A connector, and a circular multi-pin connector. Small circles at the end of thin lines point to specific areas of the graphic.

# METHODOLOGY

**A methodology was developed to achieve sustainability targets.**

- **Developed from real-life experience**
- **Action Research**
- **Operations Research**

# SIX SIGMA



**NZ Experience – methodology to systemize facilitation**

**The methodology employs the Six Sigma approach to allow reliable predictability and therefore better decision making and planning.**

**Six Sigma is a proven method for planning and implementing action to address shortfalls in organizational targets**

# ISO 14001 in Canada:

- Canada has 1,206 of the 88,800 ISO14001 certifications worldwide (as at April 2005)
- Ranked 12th in the world for uptake in 2005 and has grown from 34th in 1999 (Japan, China and Spain are the top 3 ranked).
- There is huge potential as there are 1,000,000 small businesses in Canada alone (as at 2010) which have fewer than 100 employees that would find ISO 14001 too complex.



## Luncheon & Speaker







# Employer Networking, recruitment and on-boarding

One-to-one Job Finding Tips!  
**Steve Ostafichuk, Recruiter**



# eTalent workshop: Building a Competitive Workforce

Mobile Knowledge Platforms  
**Satraj Bambra, Fusion Mobile**

eMentoring  
**Rashid Osman, Skills for Change**

HireImmigrants.ca,  
**Munira Ravji, Marketing and Partnership Specialist ALLIES, MAYTREE**



WELCOME!



# Mentoring for Change

Presenter:  
Rashid Osman

# Skills for Change

**Vision:** We envision a Canada where every immigrant succeeds

**Mission:** We provide learning and training opportunities for immigrants and refugees to access and fully participate in the workplace and wider community

# Mentoring for Change

- ☐ Matches Internationally trained professionals with established Canadian
- ☐ Offers mentoring for:
  - Employment
  - Language
  - Settlement
  - Professional development

## Brief History of SfC Mentoring

- ❑ In 1992 we pioneered Mentoring Service for Internationally Trained Professionals
- ❑ Average of 250 mentoring matches per year
- ❑ Train the trainer programs/Consultancy
  - ❑ Brampton Library
  - ❑ City of Toronto
  - ❑ Ryerson University (Consultancy)
  - ❑ Toronto and Region Conservation Authority





# Program Eligibility Criteria

## ☐ Mentors

- Have 2 + years of professional experience
- Understand Canadian workplace culture
- Understand challenges faced by immigrants
- Identify skills required to meet market demands
- Understand job search strategies
- Willing to devote 24 hrs for up to 4 months to assist mentee

# Modes of Mentoring

- ☐ Face to Face
  - Direct meeting between mentor and mentee at a convenient location
  
- ☐ E-Mentoring
  - Use of technology to exchange information during the mentoring process



# What is e-Mentoring

- ❑ The use of Internet Technology to facilitate a mentoring relationship
- ❑ Internet Technology:
  - E-mail
  - Instant Messenger
  - Skype
  - Box Net
  - Join me
  - Other technology



# Why e-Mentoring

- ❑ Mentees and Mentors are at considerable geographic distance from Skills for Change or from each other
- ❑ Mentors have relocated to other cities and provinces
- ❑ Mentees are busy with survival jobs
- ❑ Mentors are busy with their jobs and cannot meet face to face on a regular basis
- ❑ Mentees are employed and need assistance during probationary period



# Skills for Change e-Mentoring

- ❑ Secured website
  - Discussion Board
  - Email sent directly to mentoring connections
  - Monitoring of goals
  - Sharing of documents such as a resume or a cover letter
  - Participate in mentee forum or mentor forum
  - Upload articles



# Demonstration of e-Mentoring

Mentoring is a brain to pick, an ear to listen, and a push in the right direction..



THANK YOU!

The best gift that one can give,  
that cannot be retrieved, is the gift  
of time. We value your time!

*Thank you!*



## Sponsor Appreciation



XCC

Process Consulting for Success



RAI GRANT  
INSURANCE  
BROKERS



Ventures 360

Professions without boundaries