

Integrated Industrial Apprenticeship Plan For Ontario

Society of Manufacturing Engineers



Meeting: May 2, 2013



Society of Manufacturing Engineers Toronto
Advancing Manufacturing in Ontario

Take Back Manufacturing

TBM

www.SME-TBM.org

**A Forum Dedicated to Restoring
our Manufacturing Sectors.**

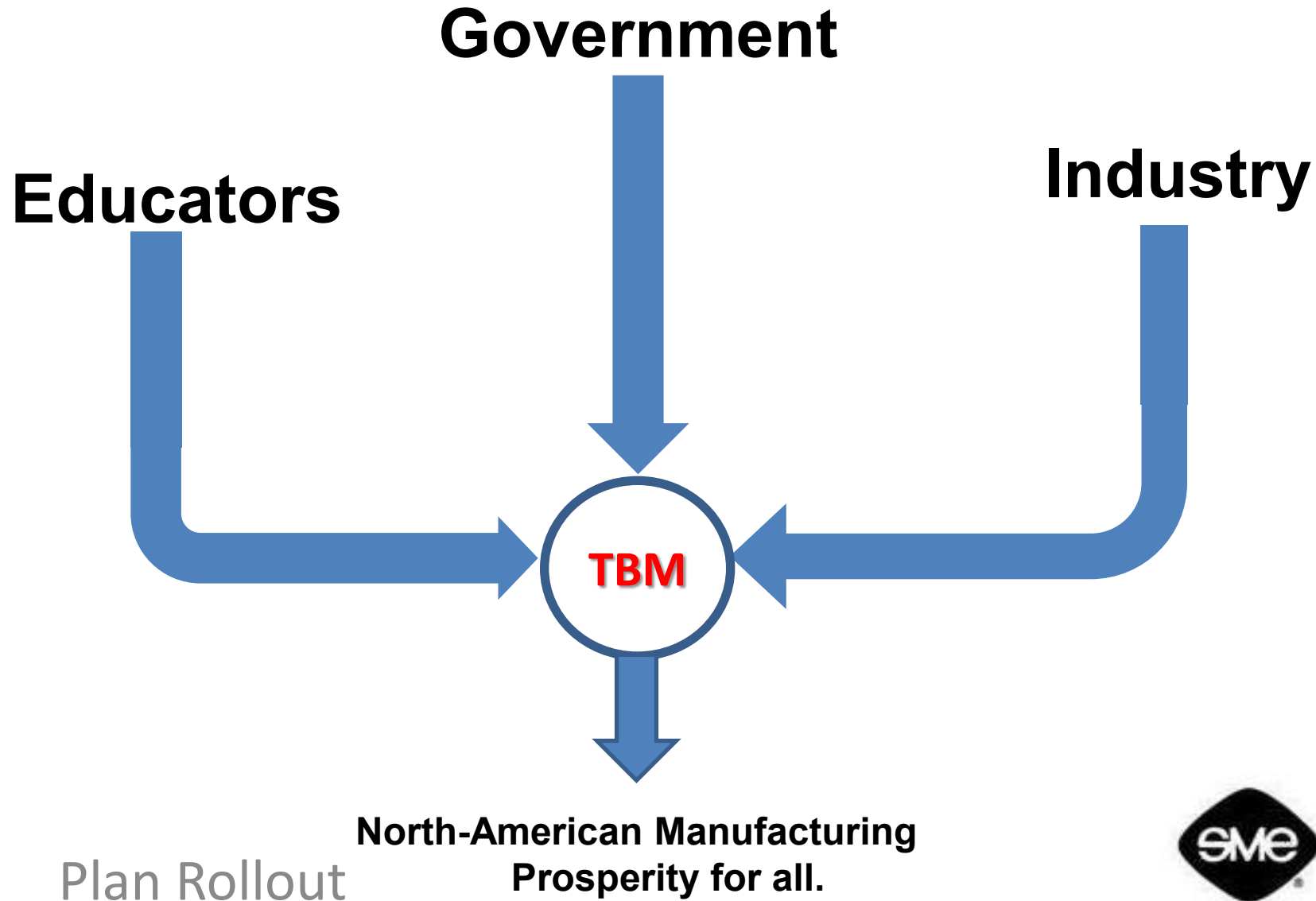




CANADA MANUFACTURING



TBM - The 3 Parallel Imperatives

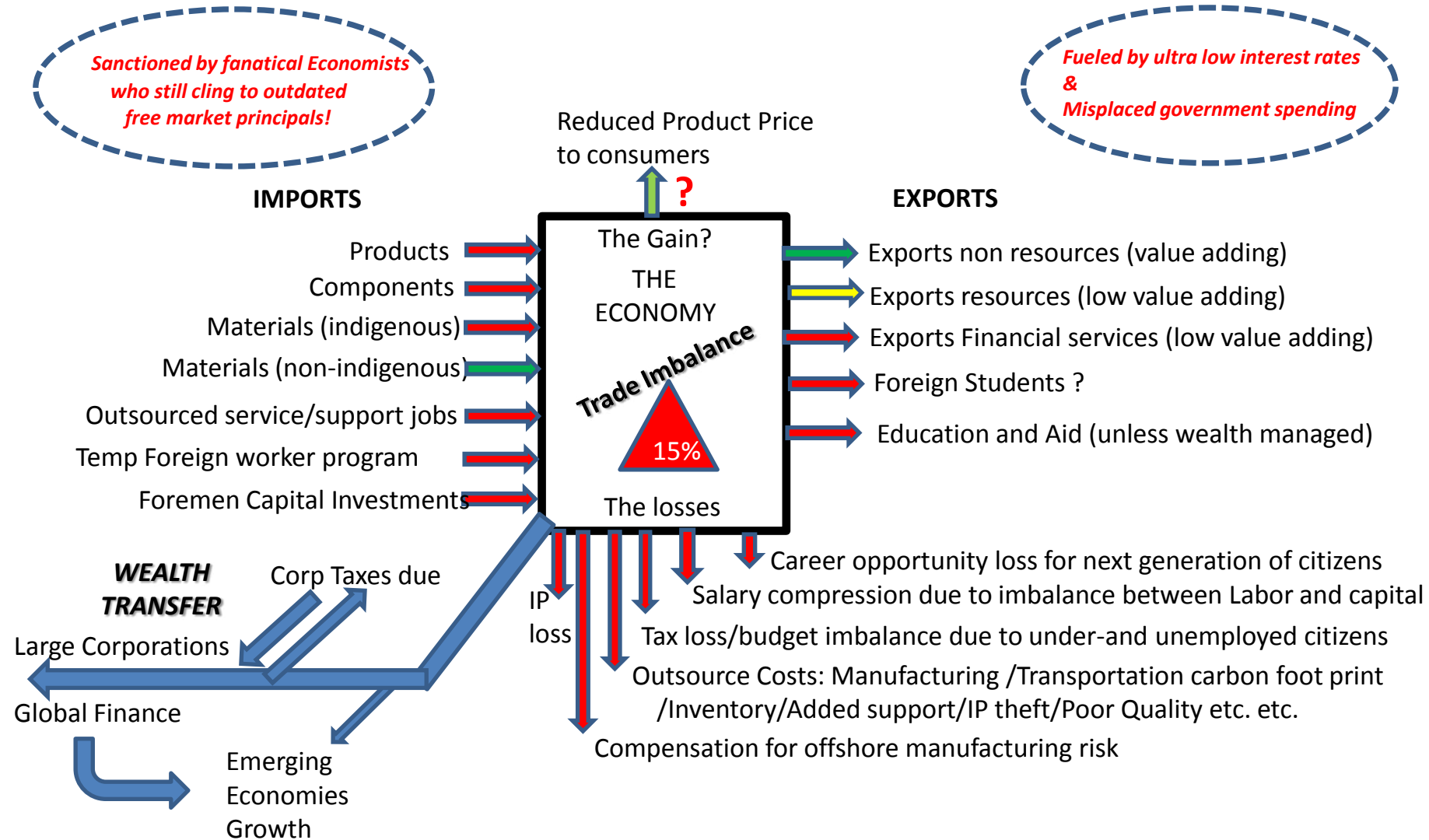


Where We Are With TBM

- Almost 2 years since we launched the initiative
- Gained a lot of moral support (mainly inside the industry)
- Provided some support to our Industrial membership
- Limited penetration in public awareness..
- Some attention span from government ... some limited action ..FED budget..
- Little attention at provincial level... Trapped in minority government mode
- Some alignment with policy groups. But still a mixed message environment
- Some solid realization that globalization and free trade not working..
 - Outsourcing of support jobs
 - Temp worker scandal
 - Garment industry third world employment mistakes
- But....Not sure if they will connect the dots!!
- Still need to stay in the fight!!!.... A huge challenge!!

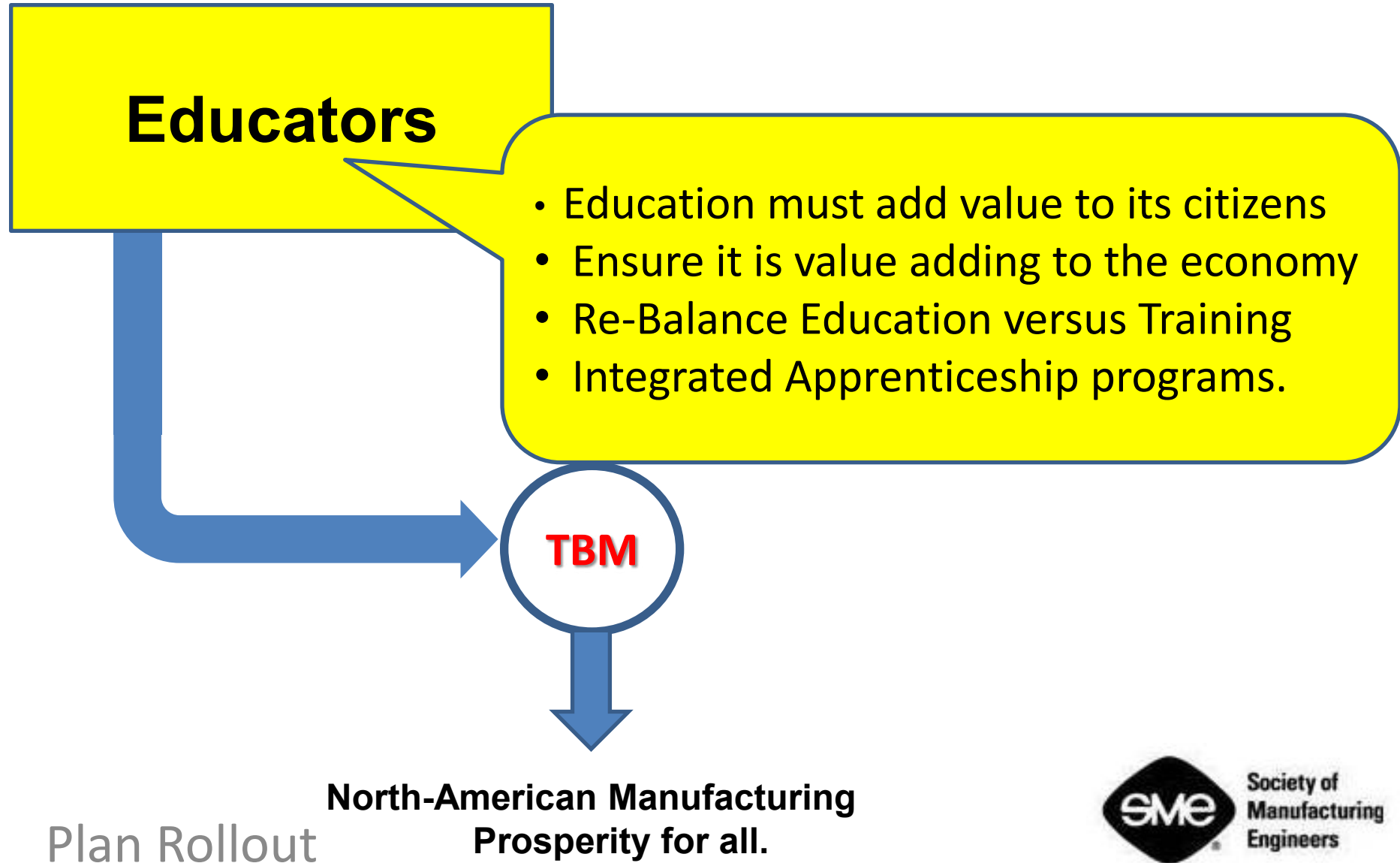
Our Economy (A Wealth Transfer Machine)

GLOBALIZATION IS NOT WORKING (FOR US)



NEED To Re-Evaluate the Import versus Export value system.

TBM - The 3 Parallel Imperatives



WHY?

Take Back Manufacturing (TBM) Will Demand The Availability Of A Future Manufacturing Workforce That Is Both Well-Educated And Well-Trained.

The Development Of The Future Workforce Has Suffered A Decline.

The Current Skill Mix In Disarray.

We Need Significant Re-Planning And Action Now To Avoid An Increasing Shortage Of Experience, Knowledge And Skills When We Try To Rebirth Most Manufacturing Sectors.

This Will Require *An Integrated And Scalable Apprenticeship System!*

Will Demand Involvement From Industry Sectors, Educational Institutions And The Local Governments.

Apprenticeship System



Plan Rollout

Agenda

- Overview 10 Mins. Ron
- Vision Statement 20 Mins. Team
- Definitions 20 Mins. Team
- Plan Rollout/Timing 10 Mins. Nigel
- Break For Pizza 20 - 30 Mins.
- The Plan 90 Mins. Team
 - Integrated Apprenticeship Pathway
 - Skills/Competencies
 - Program Plan/Resources
 - Joint Industrial Apprenticeship Board

Plan To Take Back Manufacturing Is Ontario's Opportunity

- ***Re-Shoring Manufacturing*** To Re-Balance Trade Is Fundamental To Future Wealth Creation And Prosperity For Ontario
- ***Growth In Skilled Trades And Engineers*** With New Skills To Address The New Manufacturing Reality Is The Foundation To Successful Re-Shoring
- ***Successful Workforce Training*** Leads Manufacturing Employees To Become Well Paid, Successful Entrepreneurs Or Industry Professionals: In The Skilled Trades and Engineering
- ***Entrepreneurs And Industry Professionals*** Create New Small And Mid-Size Businesses That Deliver New And Improved Products To Market, *That Once Was The Engine That Drove The Vast Majority Of Private Sector Job Growth And New Industry Creation*
- ***Industry, Government And Higher Education*** Need To Implement An Integrated Plan That Re-Balances Our Available Resources To Promote, Support And Deliver More Skilled Trades And Engineers To Our Future Marketplace
- ***Our Ontario Public And Our Youth*** Need To Be Convinced Of The Value And Reward To Participate As Skilled Trades and Engineers, And How This Participation Will Secure A Prosperous Future For Them, Their Families, And All Of Ontario

Tonight's Goal

- See If SME Members Aligned With Vision
- Recruit Help To Put Plan Together
 - Form Subgroups Tasked With Putting Together Portions Of The Plan
 - Participants Will Receive Name And Professional Recognition
- Review Plan Outline
- Assign Tasks And Schedule Next Meeting

Rules of Engagement

- Select Scribe/Timekeeper/Attendance Sheet
- ***“You Can’t Predict The Future, However, You Can Create It.”***
Peter Drucker
 1. Please Don’t Dwell On Past Negatives Or Why The Current Training System Doesn’t Work. *Use The Best Of The Past To Provide Guidance For Our New Approach.*
 2. Keep Questions/Comments Brief And To The Point.
 3. Let’s Keep To Our Timeline.

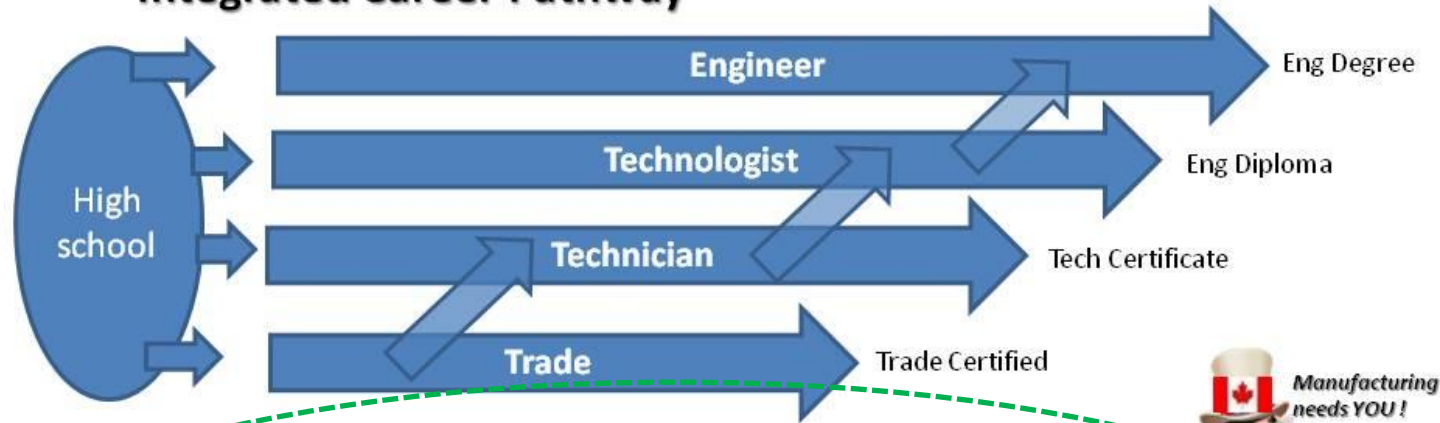
Apprenticeship System



Vision: Industrial Apprenticeship System

VISION ..Re-focus on New Apprenticeship Programme

- Integrated Career Pathway



- Industry Recognized Skills and Education Development Progression
- Apprenticeship Pool From The Best, the Brightest And The Most Talented
- Become The Learning/Occupation Destination Of Choice for High School Students
- Apprenticeship Courses Transferrable And Articulated To Other Post Secondary Colleges And Universities, Supporting Lifelong Progression In Learning As Shown In Career Pathway Above
- Industry must lead on driving and installing this system. (So..can't complain about skill shortage!!)
- **DO IT!.....** Before we loose the Industrial Experience of the Baby Boomers!!



System Vision

- Create:
 - Integrated Apprenticeship Training System
 - Professional (Workforce) Re-Training System
 - Industry Career Development Plan/Process
- Managed By:
 - A “Joint Industrial Apprenticeship Board”
 - Plan Governance
 - Plan Administration
 - Training Integrated With Education

“Key” Vision Elements

- Plan Governance
 - Joint Industrial Apprenticeship Board
 - Indentured Apprenticeship Process
 - Industry/Government/Higher Education Participation
- Plan Administration
 - Central Information/Network System
 - Harmonized Milestone Certificates/Diplomas
 - Enrollment And Counselling
 - Training Materials And Resource Development

“Key” Vision Elements

- Training Integrated With Education
 - Harmonized Core Curriculum Across Industry Sectors
 - Industry Sector Training Architecture Including Specialized Knowledge Training
 - Industry/Government/Education Partnership Programs & Resources
 - Career Pathway Mobility (Course/Program Articulation And Transfer)

Suggestion: Refine Vision Statement

- After Integrated Industrial Apprenticeship Plan Developed
- Vision Statement Brief And To-The-Point
- Bulletproof
- Is Preamble To Plan

Definitions By The Professions

- Example: PEO Definition Of Engineering
 - Professional engineering is:
 1. any act of planning, designing, composing, evaluating, advising, reporting, directing or supervising (or the managing of any such act);
 2. that requires the application of engineering principles; and
 3. concerns the safeguarding of life, health, property, economic interests, the public welfare or the environment.
- How Do You Actually Qualify “An Engineer”?
 - By Technical Specialty And Capability
 - By Skills Competency
 - By Type And Amount Of Experience
- OACETT/CCETT? “A Technician/Technologist”?
- Ontario College Of Trades? “A Tradesperson”?

Definitions

- Apprenticeship
 - Apprentice Trained Tradespersons
 - Apprentice Trained Technicians/Technologists
 - Apprentice Trained Engineers
- If You Successfully Complete An Apprentice Trained Program..... :
 - Does This Make You A Master At Your Profession?
 - Does This Require A Special Professional Designation?
 - Does This Promote The Profession?
 - **Does This Automatically Qualify The Individual To Practice His/Her Profession?**

Definition: Successful Plan & Program

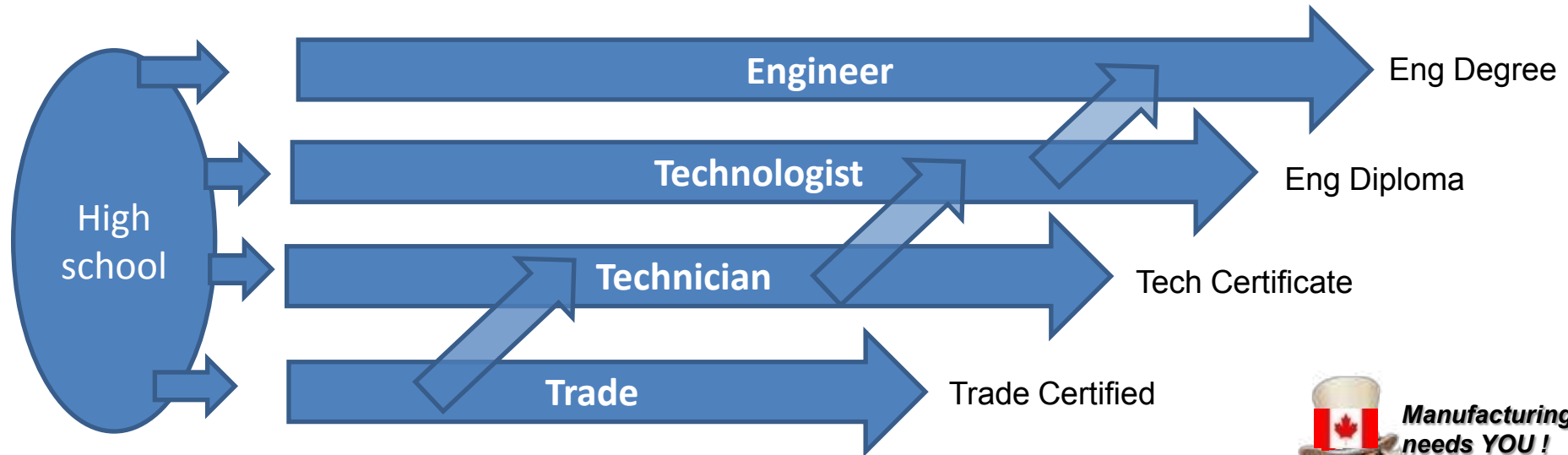
- When You Complete A Program As An Apprentice Trained;
 - Trade
 - Technician/Technologist
 - Engineer
- You Become A Fully Qualified And Licensed Practicing Professional;
 - Tradesperson
 - Technician/Technologist
 - Engineer

Apprenticeship System



VISION ..Re-focus on New Apprenticeship Programme

- **Integrated Career Pathway**



- Industry Recognized Skills And Education Development Progression
- Apprenticeship Pool From The Best, The Brightest And The Most Talented
- Become The Learning/Occupation Destination Of Choice For High School Students
- Apprenticeship Courses Transferrable And Articulated To Other Post Secondary Colleges And Universities, Supporting Lifelong Progression In Learning As Shown In Career Pathway Above
- Industry Must Lead On Driving And Installing This System. (*So..Can't Complain About Skill Shortage!!*)
- The Integrated Education And Training Must Provide A Highly Flexible Workforce.
- **Do It!..... Before We Loose The Industrial Experience Of The Baby Boomers!!**



Plan Rollout



ACTION

Form A **Joint Industrial Apprenticeship Board** That Will Convene Full-time To Design And Administer Such A System.. And A Member Of Cabinet For Both Federal And Each Province Will Be Appointed Specifically To This Task.

We Will Operate An Industrial **Indentured** Apprenticeship Process To Ensure Stability.

Participant Funding To Be Shared Between... Industry/Government/Family.

The System Must Include All Grades Of Skill From Trade Entry Positions To Professional Engineer; Integrating Government, Industry, And Professional Regulating Organizations.

All Current Professional Societies And Associations Will Integrate Requirements And Operate One System Of Acceptance Within This Apprenticeship Process.

Vision Of Our Path Forward (Strategy)

- Create Strong Vision And Plan Identifying Professional, Industrial And Societal Benefits
- Sell This To The Professions, Accreditation/Licensing Authorities
- Sell This To Key Industry, Labor, Government and Education Entities
 - Form A Coalition From Above Entities
 - Create And Launch Joint Industrial Apprenticeship Board
 - Create An Integrated Industrial Apprenticeship Pilot Programme
 - Select Programme Participants & Setup Programme
- Launch Demonstration Programme

Plan Rollout/Timing-Nigel

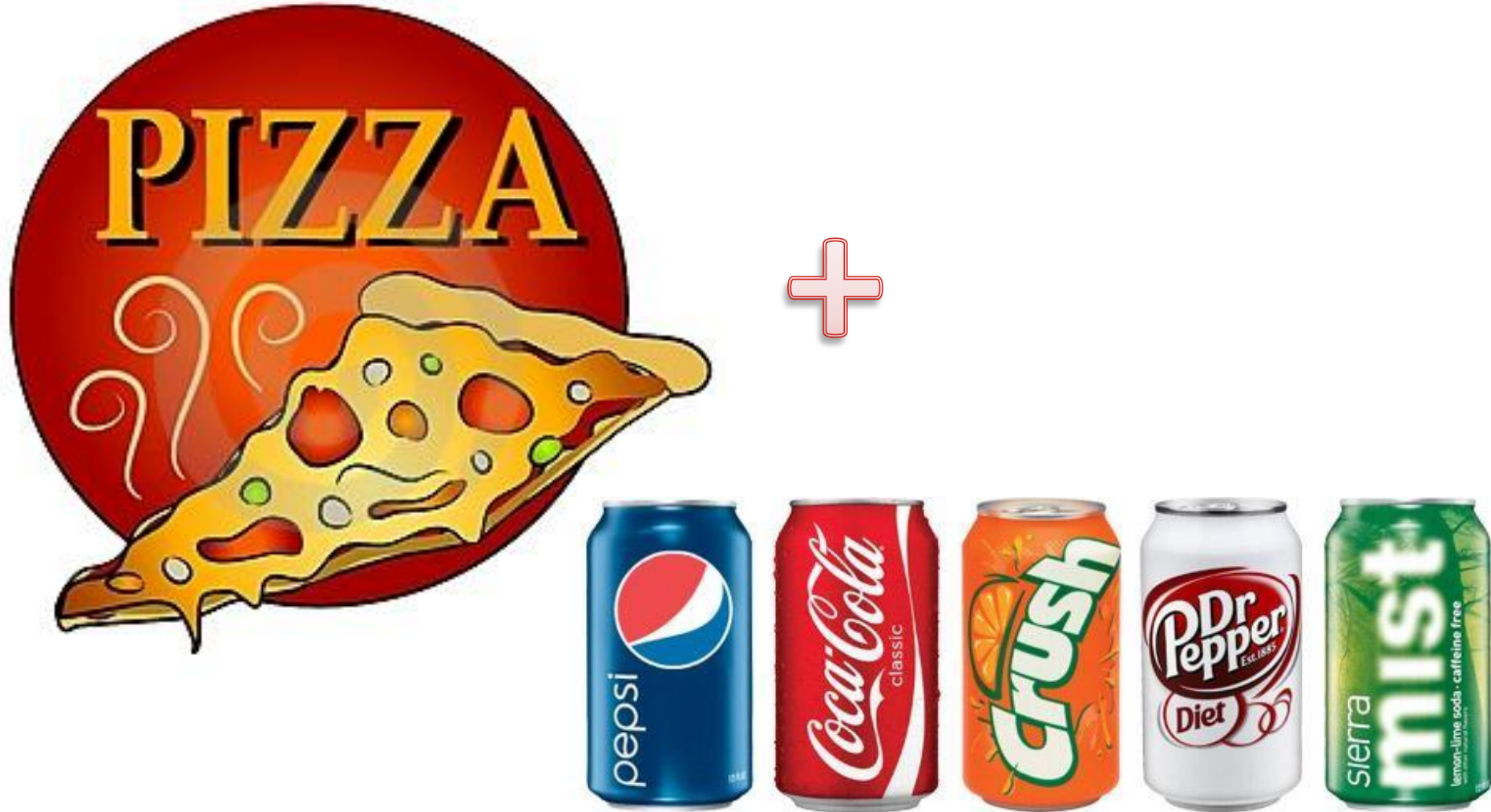
Agree as a TBM team... (Mid 2013)

Gather support from other groups (Late 2013)

Lobby Government (Provincial)... (Ongoing from late 2013)

Assist with Joint Industrial Apprenticeship board formation.. (TBD)

Let's Take A Break



Break

Integrated Industrial Apprenticeship Plan For Ontario

“THE PLAN”

Develop: Integrated Apprenticeship Career Pathway Process

- Apprentice/Training Pathway (Career Steps)
- Trades, Participants, And Stakeholders
- Timing To Completion
- Earned Credentials/Licenses

Develop: Skills/Competencies

- Definition Competency: A Cluster Of Related Abilities, Commitments, Knowledge, Experience And Skills That Enable A Person To Act Effectively In A Job
 - Academic Core Competencies
 - Technical Competencies
 - Workplace Skill And Achievement
 - Interpersonal Skill

Develop High Level Program Plan/Delivery & Resource Commitment

- Industry Requirements, Participation & Support
- Education/Training Delivery
- Apprentice Indenture And Commitment
- Government Requirements, Constraints, & Commitment

Joint Industrial Apprenticeship Board

- Apprenticeship Training System
- Professional Retraining System
- Industry Career Development Plan
 - Governance
 - Administration
 - Training/Education Integration

Joint Industrial Apprenticeship Board

To undertake such an apprenticeship system will require that we form **one** body for joint industry education and training.

To do this we must focus on economic goals not purist educational goals.

We must start parallel activities as follows:

Apprenticeship Training System

Design and undertake an integrated and graduated apprenticeship program for all trades and professions.

Link with firm industry demand projections for industry employment and development.

Support apprenticeships for both current professionals and those new to manufacturing by allowing entry at various stages of the program.

Setup job creation programs for young people.

Communicate and promote this process to young people/Parents/Teachers.

Rebuild strong employment goals for the next generation!

Professional Re-training system

Define and plan for Professional re-training of management and technical staff.

Link with firm industry demand projections to support industry employment and development.

Industry Career development plan

Provide career development consulting centers

Link with firm industry demand projections to support industry employment and development.

Next Steps/Assignments/Next Meeting

- Vision Statement _____
- Definitions _____
- The Plan
 - Integrated Apprenticeship Pathway _____
 - Skills/Competencies _____
 - Program Plan/Resources _____
 - Joint Industrial Apprenticeship Board _____

Home	Survey	Events	Photo Gallery	Information	Our Chapter Organization	News	Student Chapters
Take Back Manufacturing	How to Find Us	Chat line	JOB Spot	Contact Us	Education & Training Group		



[Home](#) > Education & Training Group

Where are we?

SME Toronto
 7100 Woodbine Avenue
 Section 312
 Markham Ontario
 L3R5J2... [Click for Map](#)

Chair Nigel Southway
 Phone: 905 4645517
 email: Nigel.Southway@smetoronto.ca

Want to
 Become a
 Member?