

Measuring Event Effectiveness



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Professional Engineers
Ontario



engineers without borders
ingénieurs sans frontières
Canada



ONTARIO
SOCIETY
OF PROFESSIONAL
ENGINEERS

Agenda



- Why measure? Why use the Scorecard?
- How the Scorecard works
- How the Survey Works
- Next Steps
- Q&A



Why Measure?



- Learn how great events are run
- Continue to improve year after year
- Achieve our goal of changing public perception of engineering and technology
- We are critical thinkers, professionals, and analytically-minded people



Why a Scorecard?



- Track performance + drive improvement
- Create structure for planning + coordination
- Allow for comparison + healthy competition
- Smooth out reporting process



The thing about Outreach...



- Are we doing a good job? How do we know?
 - Budget and attendance numbers are good, but not enough
 - Increased enrollment data takes 10+ years to collect
 - Anecdotal/experience-based evidence from organizers
- Raising awareness of engineering and technology
 - Has many other immediate benefits to your chapter: recruitment, relationship-building, community-building
- We must understand the messages our participants are taking away



Effective Messaging



Messaging Key

Shape the world around us: yesterday, today and tomorrow.	A
Safety, health, happiness. Make a world of difference.	B
21th century challenges require diversity. There's a place for you!	C
Creativity and imagination to turn ideas turned into reality.	D

Messaging Guidelines



1. Engineering and technology solutions to a diverse set of 21st challenges requires a *diversity* of thinkers. *There's a place for you* in engineering and technology!
2. Engineering and technology *shape the world around us*; yesterday, today and tomorrow.
3. Engineering and technology apply *creativity and imagination* to turn ideas in reality.
4. Engineering and technology are essential to the *safety, health, happiness*, comfort and efficiency of our friends, family and distant neighbours. Locally and globally, people working for people. Engineers and technologists *make a world of difference!*



Checklists



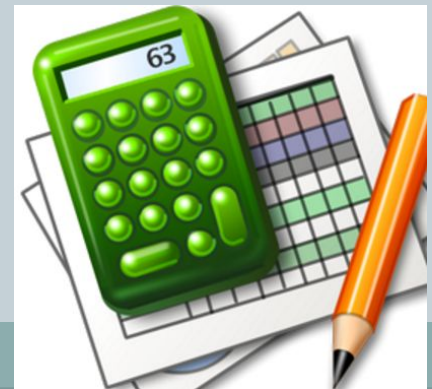
- Use the “Checklists” tab to help yourself with the planning, execution and wrapping-up of the event

EVENT PLANNING CHECKLISTS						
BEFORE EVENT			DURING EVENT		AFTER EVENT	
Have meeting with your team in February			Check in on event day, before event		Meet after event day	
Review scorecard and record:			Discuss with team:		Review scorecard and record:	
Basics:	Have we got a plan to deliver our intended messages?	No				
	Is someone taking charge of the surveys? Bringing pens/pencils as necessary?	No	Have we got copies of the survey and pens/pencils on hand for participants? Who is going to distribute, explain and collect them?	No	What did surveys say?	No
	How many people are we expecting? From what age/demographic?	No	Is someone taking a headcount?	No	How many came?	No
	Do we have enough space, food, supplies, prizes, materials, etc?	No				
	How are we tracking toward our budget?	No			How much did we spend?	No
Other logistics:	Have we checked our online event listing and supplied any missing information?	No	Have we completed our event setup?	No	Have we paid venue, vendors?	No
	Confirmed the venue?	No				
	Briefed our volunteers?	No	Instructed our volunteers?	No	Thanked our volunteers?	No

Introducing the NEM Scorecard



- Help you plan your event
- Help you measure the effectiveness of your event
- Help you report the event to NEM
- Next year we know what works/what doesn't work for successful outreach
- Gather examples of best practices for successful outreach
- Unlock remaining event funding from NEM Committee



NEM Ontario Scorecard for 2017



National Engineering Month Ontario Event Scorecard

Organizing Group and Contact Name	OACETT College Challenge, Centennial College, Daniel S
Event Title	Facing The Future
Event Date	1st March 2016

Basics				
Description	Before (Plan)	After (Actual)	Score	Possible Score
Messaging	A	0	0	20
Attendance	260	215	12	15
Budget	50	65	4	15
Media	A,B,D,E	0	0	10
Improvement over last year	B,E	0	0	10
Basics Total			16	70

Advanced				
Description	After (Actual)	Score	Possible Score	
Social Media	14	10	10	
Collaboration	0	0	10	
Participant Engagement	0	0	5	
Volunteer Engagement	0	5	5	
Promotion of Diversity	6	5	5	
Advanced Total		20	35	

Bonus				
Description	After (Actual)	Score	Possible Score	
Create and post writeup on chapter website for media promotion	No	0	3	
Create a profile of one or more of your chapter members/ volunteers	Yes	3	3	
Uploaded photos to NEM Dropbox	no	0	3	
Quote participants	no	0	3	
Promote NEM Campaign	no	0	3	
Bonus Total		3	15	
Total Event Score		39	120	

Notes

How does it work?



- The Scorecard has three sections and a points system:
 - Basic elements (5) – worth a total of 70 points
 - Messaging, Attendance, Budget, Media, Improvement
 - Advanced elements (5) – worth a total of 35 points
 - Social Media, Collaboration, Engagement, Diversity
 - Bonus points (5) – worth up to 15 additional points
- Organizers score their own events: Actual vs Plan

Basics (70 Points)

Basics					
Categories		Before (Plan)	After (Actual)	Score	Out of
1	Messaging	A			20
2	Attendance	260	215		15
	Grades 1-8	10	10	12	
	Grades 9-12	20	30		
	University/College	30	40		
	Young Professionals	40	50		
	Established Professionals	50	0		
	General Public	60	20		
3	Budget	\$50.00	\$65	4	15
4	Media	A,B,D,E			10
5	Improvement over last year (if applicable)	B,E			10
Total				16	70

1. Messaging 20 Points
2. Attendance 15 Points
3. Budget 15 Points
4. Media 10 Points
5. Improvement 10 Points



Basics: Messaging Alignment (20 Points)



- **Message Alignment**

- Did satisfactory % of attendees understand the message?
- What were the unintended messages?

Messaging Notes

Before (plan) comes from your funding application, question 13. After comes from your survey results. Score comes from the rubric below)

Basics: Message Alignment (20 Points)



- Before: identify which messages you plan to deliver

Event Details:

13. What message(s) will your event or activity deliver about engineering and technology to the target audience(s)? Check all that apply:

☐ Engineering and technology shape the world around us: yesterday, today and tomorrow.

☐ Engineering and technology are essential to the safety, health, happiness, comfort, and efficiency of our friends, family and distant neighbors. Locally and globally, people working for people. Engineering and technology make a world of difference.

☒ Engineering and technology provide solutions to the diverse set of 21st century challenges and require a diversity of thinkers. There's a place for you in engineering!

☒ Engineering and technology applies creativity and imagination to turn ideas turned into reality.

☐ Engineering and technology require skills in math and science.

☐ Other; please specify: _____

- Already submitted in your funding application

Messaging Measurement Tool: Survey



- Developed by researchers at Queen's University
- Why?
 - There are no right or wrong answers, just participant feedback
 - See if your messaging is aligned, participants have fun
 - What worked? Did they get it?
 - Simple, quick, fun, easy to read
 - Great for social media posts



What does the NEM Survey look like?



Hello!

Thanks for participating in our activity today. We hope you had fun and learned something about engineering and technology today! This survey is to help make sure WE are doing a good job of explaining things to you. There are no right or wrong answers to this survey, just whatever comes to mind is what we want to hear. Let's get started!

National Engineering Month Ontario Participant Survey

1. Circle your gender:

Male

Female

Other

2. Tell us your age:

3. Provide three words to describe engineering and technology

•

Some previous years' survey responses



National Engineering Month Ontario Participant Survey 2014

1. Circle your gender:

Male

☒ Female

2. Tell us your age:

13

3. Provide three words to describe engineering and technology

- Fun
- Cool
- Very interesting

6. What did you find most exciting or interesting about this activity?

• I like, rush I had when the gears made the wheels move

7. What did you learn about engineering and technology today that you didn't know before?

You fail many times but then you finally get it right.

4. Do you think engineering and technology affect how healthy people are?

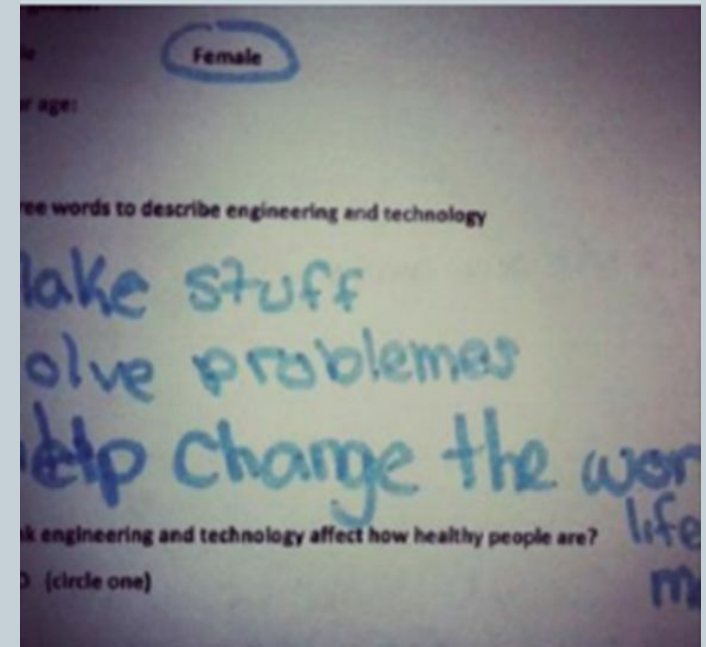
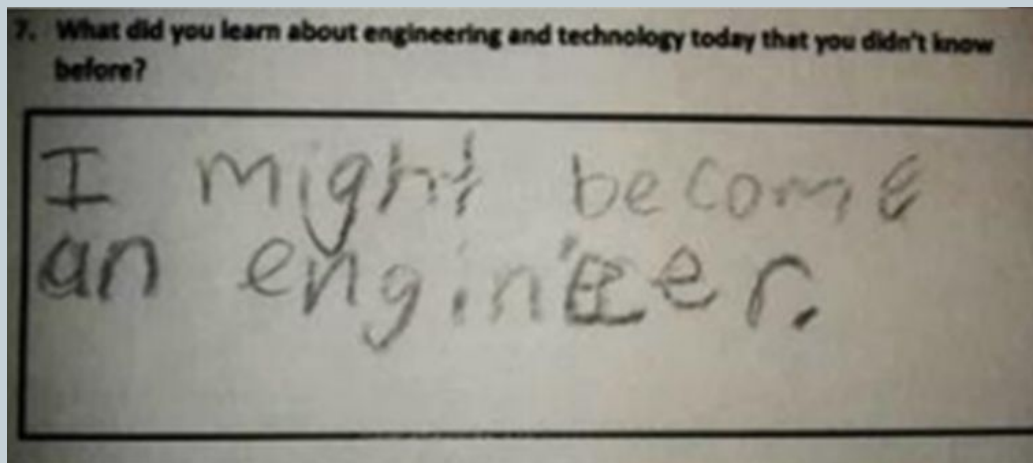
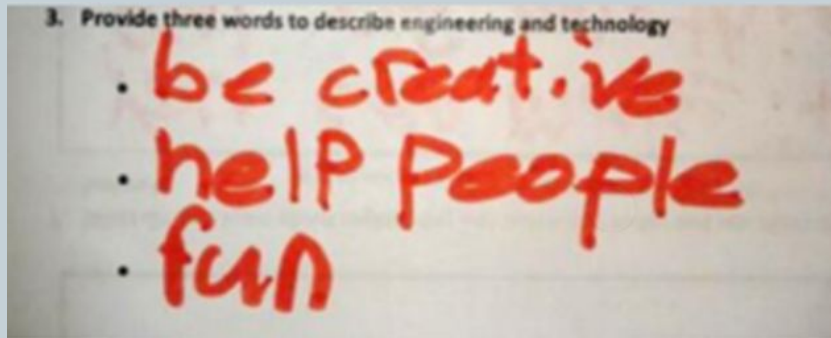
☒ YES

NO (circle one)

Why?

Some engineers control air pollution, water pollution and design technology which can help us stay fit.

Some previous years' survey responses



Did they get the message?



5. Do you think engineering and technology affect our safety?

YES NO (circle one)

Why?

A well engineered product is depended on
for our safety just like that bridge.
If engineers don't make something
correctly, it could be the difference between
life and death.

Did they get the message?



7. What did you learn about engineering and technology today that you didn't know before?

Engineering helps in harvesting food,
getting water and many other things you
don't expect it helps with.

Basics: Message Alignment (20 Points)



- During: administer survey

1. Circle your gender

Male

Female

2. Name three words that describe engineering

- creative
- unique
- hands-on

Basics: Message Alignment (20 Points)



- After: analyze survey data and check message alignment

5. Do you think engineering and technology affect our safety?

YES NO (circle one)

Why?

Engineers solve problems, and if there is a problem that concerns our safety, they will solve it.

Messaging Alignment Scoring Rubric (15 points)



Scoring Rubric		Points
Audience reported all intended messaging		20
Audience reported no intended messaging		0
Audience reported some intended messaging		5
Unintended messaging (negative)		-4
Unintended messaging (from guide)		2

Basics: Number of Attendees (15 points)



Attendance Notes

Before (plan) comes from your funding application, question 12.
After (Actual) comes from the actual attendance at your event.
Your score comes from the rubric below.

Attendees: Scoring rubric



Scoring Rubric	Points
On, above or 10% below target	15
25% less than target	12
40% less than target	8
50% less than target	4
More than 50% below target	0

Basics: Budgeting (10 Points)

- Full points for spending equal or less than budgeted

Budget Notes

Before (plan) comes from your funding application budget, total expenses.

After (Actual) comes from the total actual event expenses.

Your score comes from the rubric below.



Budget: Scoring rubric



Scoring Rubric	Points
On budget or under	15
Over budget +10%	12
Over budget +25%	8
Over budget +30%	4
Over budget +40%	2
Over budget +50%	0

Basics: Media (10 Points)



Media Notes

Before (plan) comes from your funding application, question 15.

After (Actual) comes from what you actually did.

Your score comes from the rubric below

Basics: Media Scoring rubric



Scoring Rubric		Points
A	Designating a media coordinator	2
B	Promotion through social media	2
C	Designated photographer	2
D	Inviting local media (newspapers, magazines, blogs)	2
E	Inviting local dignitaries or personalities	2

Basics: Improvement Scoring (10 Points)



Scoring Rubric		Points
A	Larger audience	2
B	Quality of messaging	2
C	Better execution on event budget	2
D	Improving attendee engagement	2
E	Greater event impact through social media	2

Improvement Notes

Before (plan) comes from your funding application, question
After (Actual) comes from what you actually did
Your score comes from the rubric below

Advanced Elements (35 points)



- Social media – 10 points
- Collaboration – 10 points
- Participant engagement – 5 points
- Volunteer engagement – 5 points
- Promotion of diversity – 5 points



Advanced Elements: Social Media (10 Points)



Category 1: Social Media

Social Media Notes

Enter total number of posts from event from each social media post with #NEM2017 included. You will be given 2 points for each - up to maximum of 10.



facebook.com/NEMOntario



twitter.com/NEMOntario



[@NEMOntario](https://www.instagram.com/NEMOntario)

#NEM2017

@NEMOntario

Social Media Scoring Rubric

- Count up total number of posts from event from each social media post with #NEM2017 included
- Give yourself 2 points for each - up to maximum of 10.



Advanced Elements: Collaboration (10 Points)

Category 2: Collaboration

Attendance Notes

Enter number of external organizations invited to collaborate in your event, either through co-delivery, promotion, supplying volunteers or speakers.

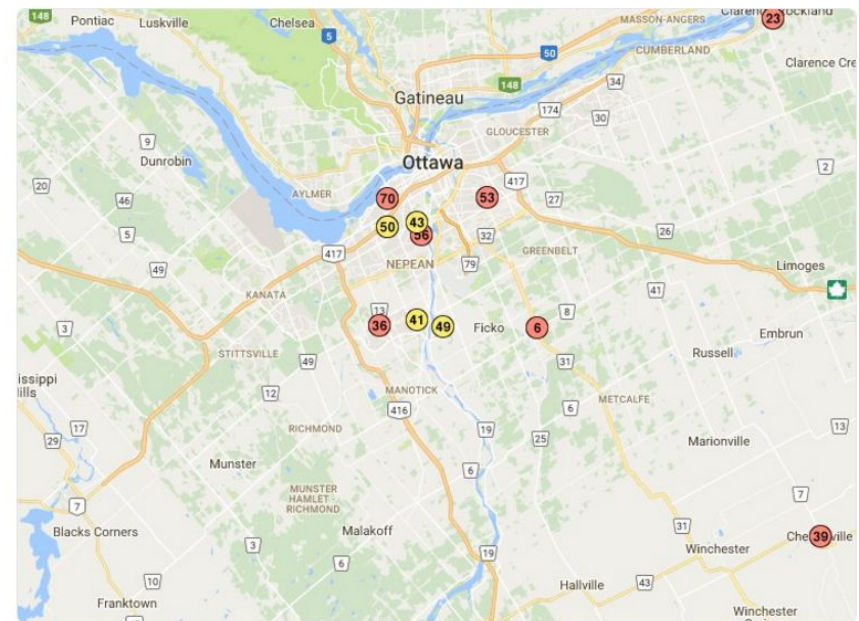
e.g. OPSE, PEO, OACETT, IEEE, EngSoc, Actua, Science Expo.

You will be given 2 points for each - up to maximum of 10.



Engspire @EngspireKids · Feb 1

HELP! Do you know any #superengineers to save the day to inspire girls this #NEM2017? @O_S_P_E @OttawaPEO @EWBottawa bit.ly/2hOQscZ



Example of collaboration

- Teaming up with organizations in your community to organize or promote your event earns you collaboration points!
- Examples: Girl Guides, Boy Scouts, YMCA, IEEE, Rotary, Big Brothers/Sisters, Libraries, Science Centres, Museums, local schools.
- Local festivals or events calendars.
- Don't forget about the Actua camps and the partner orgs (PEO, OACETT, OSPE, EWB).



Girl Guides
of Canada
Guides
du Canada



IEEE

*Advancing Technology
for Humanity*



Big Brothers Big Sisters

Advanced Elements: Participant Engagement (5 Points)



Category 3: Participation Engagement

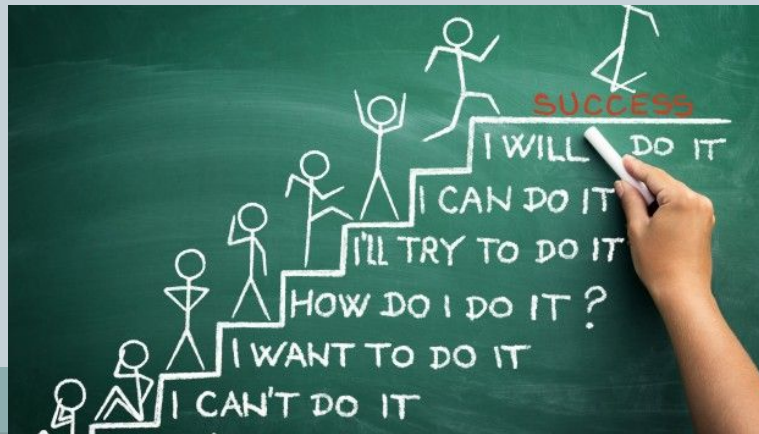
Participant Notes

Enter number of activities, games, interactive features you had to engage participants.
Give yourself a score from 0 to 5 based on how well the participants were engaged:
0 - not engaged at all
5 - highly engaged



What is a successful NEM event?

- Our goal: Bring engineering and technology to life for the next generation and the general public
- Our method: Put on great events to inform and inspire! We want our audience to feel:
 - Interested (relate to your audience; learn their knows & likes)
 - Energized (control level of detail, connect to their knowledge)
 - Challenged (touch on some big interesting questions too!)
 - Confident and proud of themselves (come back!)



Participant Engagement: What Works?



- Small volunteer to participant ratio
- Age-appropriate language
- Hands-on activities
- Engaging all types of learners: event has visual, oral, tactile elements
- Participant discussion encouraged. Eg.: 5 min. discussion before presentation to discuss an open-ended question (what was your favourite part?) in small groups



Advanced Elements: Volunteer Engagement

- Enter number of volunteers who collaborate in your event, by for example:
 - Finding or scouting out venue space
 - Coordinating or buying supplies for the event
 - Designing or delivering the event content/workshop
 - Promoting the event
 - Recruiting or providing volunteers, judges, speakers
 - Helping out with logistics on the day: parking, directions, signs, feedback forms, giveaways, answering questions, etc.
- We want to know how many people are involved!



Volunteer Engagement : Scoring Rubric



Volunteer Notes

Enter the number of volunteers who contributed to the planning and running of your event. They may have helped you out with research, budgeting, venue planning, promotion before the event or execution on the day of the event.

Give yourself a score from 0 to 5 based on how well the volunteers were engaged:

0 - not engaged at all

5 - highly engaged

Advanced Elements: Promotion of Diversity (5 Points)



There Is A Place for You



Diversity Notes

Enter the number of times your event mentioned diversity, used inclusive language, communicated the importance of diversity or integrated any of the tips provided in the diversity webinar? Give yourself 1 point for each up to a maximum of 5

Promotion of Diversity: Scoring Rubric



- How many times did your event mention diversity, use inclusive language, or communicate the importance of diversity?
- Give yourself 1 point for each time for a maximum of 5 points



Bonus Points (+3 each)



- Points awarded for integrating examples of best practice!
 1. Create and post write up on chapter website for media promotion, then send us the link.
 2. Upload photos to your NEM Dropbox (the link was recently emailed to your main organizer)
 3. Quote participants (Overheard at #NEM2017)
 - Post quotes from your event on Social Media

Bonus Points (+3 each)



4. Promote NEM as a whole (in addition to your event)
 - Use #NEM2017
 - Interact with the NEM Ontario Facebook, Twitter and Instagram accounts

5. Submit 3-5 mini profiles of people in your organization to NEM Ontario
 - Details on the next slide

What's a mini-profile?



- Stories from your engineering/technology employees. *Here are a few questions you may ask an employee to create a profile.*
 - Tell us about a time when you felt proud of what you accomplished in your job.
 - How did you know you were meant to be an engineer/engineering technologist?
 - What are the most exciting types of problems you like to solve?
 - What's the coolest project you ever worked on and what was the result?

Checklists



- Use the “Checklists” tab to help yourself with the planning, execution and wrapping-up of the event

Advanced:	Have we designated a media co-ordinator?	No	Are we ready to take photos, video and gather quotes?	No			
	Invited local media?	No	Talk to local media?	No		Did we get coverage?	No
	Designated someone to take photos?	No				Did we post or share photos, videos, quotes?	No
	Designated someone to take videos?	No					
	Designated someone to quote participants?	No	Are we live-tweeting/posting?	No			
	Set up social media platforms?	No					
	Watched the social media webinar?	No					
	Have we invited other groups, organizations in our community to attend or help us deliver? Local dignitaries? Other outreach organizers?	No	Have we welcomed guests?	No		Thanked guests for coming?	No
	Have we prepared our volunteers with age-appropriate explanations, interactive games or activities?	No	Are the participants interested and engaged?	No			
	Are we prepared to demonstrate diversity?	No				How did we do?	No
Are we prepared to improve over last year?	No				How did we do?	No	
Bonus:	Did we post a write up on our website for media promotion?	No	Are we sharing 'Overheard at NEM' quotes?	No		Are we promoting other chapter's events?	No
	Are we promoting NEM Ontario campaign?	No					

Projected order tab for NEM 2018



Projected order for 2018			
Item	How many might you want in 2018? (Just a guess is helpful.)	Did you get your desired quantity of this item in 2017?	Other comments
XS tshirts			
S tshirts			
M tshirts			
L tshirts			
XL tshirts			
Youth Poster			
Uni/College Student Poster			
Professional/Public Poster			
Official NEM Souvenir			2014 a Rubik's cube, in 2015 a pair of headphones, 2016 was a robot pen
Thank you! We'll plan better with this info.			

- Helps us budget and plan next year's campaign
- Enter your best guess of how many t-shirts, posters and other merchandise you would like to receive

Completing and sending in your event scorecard

Basics				
Description	Before (Plan)	After (Actual)	Score	Possible Score
Messaging	A	0	0	20
Attendance	260	215	12	15
Budget	50	65	4	15
Media	A,B,D,E	0	0	10
Improvement over last year	B,E	0	0	10
Basics Total			16	70

Advanced				
Description	After (Actual)	Score	Possible Score	
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Bonus				
Description	After (Actual)	Score	Possible Score	
Create and post writeup on chapter website for media promotion	No	0	3	
Create a profile of one or more of your chapter members/ volunteers	Yes	3	3	
Uploaded photos to NEM Dropbox	no	0	3	
Quote participants	no	0	3	
Promote NEM Campaign	no	0	3	
Bonus Total		3	15	
Total Event Score		39	120	

- Fill out your event scorecard and put it in your NEM Dropbox or email it to nemontario@ewb.ca
- Immediately after your event and no later than May 15th 2017
- Your second funding instalment will be sent upon receipt of your completed scorecard

Some Final Reminders

- Attend or watch [webinars](#)
- Look out for your first round of funding
- Merchandise will arrive the week of Feb 20th
- Completed scorecards are due May 15th 2017
- Look at our blog and share content on #NEM2017
- Have fun!



Professional Engineers
Ontario



engineers without borders
ingénieurs sans frontières
Canada



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SOCIETY
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ENGINEERS