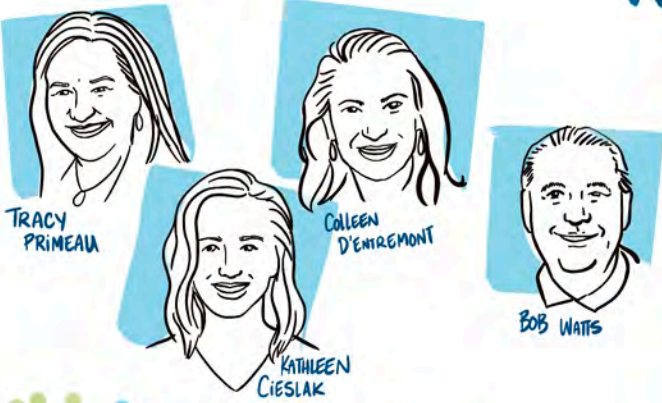


INDIGENOUS INCLUSION &

INTERWEAVING WORLDVIEWS IN OUR WORK



Moving from CONSULTATION to ENGAGEMENT

What does Indigenous engagement look like?

- o employment?
- o environment?
- o TRAINING?
- o Collaborating with Communities?

My Responsibility is the SAFETY of the COMMUNITY!



BUILDING RELATIONSHIPS & SHARED PROJECTS

We are all different... Like an Indigenous "UN"



TALK FACE TO FACE

BUT WE AREN'T "AGAINST PROGRESS"



FINDING INDIGENOUS CONCEPTS & FRAMEWORKS TO DESCRIBE NUCLEAR ENERGY

DON'T JUST COME WITH NUMBERS... TELL YOUR STORY

GET TO KNOW EACH COMMUNITY DEEPLY

YOU DON'T NEED TO HAVE ALL THE ANSWERS

BE INFORMED BUT STAY OPEN TO THE SYNERGIES OF COLLABORATION



THE OPPORTUNITY TO SUPPORT COMMUNITIES through Collaborative & Respectful Working Relationships



IF WE'RE BUYING CANADIAN LET'S MAKE SURE WE'RE BUYING INDIGENOUS

Indigenous folks are creating businesses at 9x THE RATE of Non-Indigenous folks



= PROCUREMENT =

COMBINING WESTERN SCIENCE, INDIGENOUS KNOWLEDGE & RECONCILIATION



IT TAKES HUMILITY FROM EVERYONE INVOLVED

- △ RECONCILIATION TRAINING
- △ SHARING DATA
- △ EVALUATION
- △ PARTNER WITH KNOWLEDGE KEEPERS AT EVERY STAGE

Fill your BRIEFCASE WITH...



Understand the importance of... CEREMONY

- o IN DECISION MAKING
- o IN COLLABORATION

BUILD RELATIONSHIPS BUILD TRUST

RISK, PUBLIC ATTITUDES AND SOLUTIONS FOR

ENGAGEMENT IN NET ZERO



TELL THE STORY OF NUCLEAR

JOHNSON-SHOYAMA GRADUATE SCHOOL OF PUBLIC POLICY

LOW DOSE RADIATION PROJECT ONTARIO & SASKATCHEWAN

COMMUNICATION AROUND SMR & NET ZERO

MUST BRIDGE THE POLARIZATION BETWEEN SMR & RENEWABLES LIKE SOLAR & WIND

HIGH TRUST IN SCIENTISTS

LOW TRUST IN ELECTED OFFICIALS

THEY WON'T LISTEN TO US...



YOUTH

YOUNGER GENERATIONS HAVE BEEN HARD TO REACH.

2000+ RESPONDANTS
80 QUESTIONS



FOCUS GROUPS (NOW UNDERWAY)

Key FINDINGS:

- PROXIMITY TO NPS MATTERS IN TERMS OF SUPPORT
 - LARGEST CHANGE OCCURS AT 20-30 KM
 - SMR RANKED 3RD FAVOURITE CHOICE BY RESPONDENTS (SOLAR IS PREFERRED)
- familiarity is important for ACCEPTANCE



CLIMATE CHANGE VIDEO GAMES

- MULTI OUTCOME
- CHOICE

CONVERSATIONS AROUND CLIMATE CHANGE SHOULD NOT BE DOMINATED BY THE GENERATIONS THAT CAUSED IT.

Early engagement is vital!

CENTRE YOUTH & INDIGENOUS VOICES

2-WAY CONVERSATIONS & DIALOGUES

NEXT STEPS:

- TRUSTED INFORMATION SOURCES
- CONSIDER CONTEXT & NUANCE IN EACH GROUP / COMMUNITY
- EMPHASIZE/EMPOWER INDIGENOUS ENERGY SOVEREIGNTY



ON-GOING RELATIONSHIPS Based in TRUST

INDIGENOUS COMMUNITIES



ARE SELF-DETERMINING

- BUILD RELATIONSHIPS & TRUST
- ENERGY SOVEREIGNTY
- ENERGY LITERACY
- DIFFERENT NEEDS & PERSPECTIVES FOR EACH COMMUNITY
- ENGAGEMENT FATIGUE: ALLOW COMMUNITIES TO HELP DESIGN THE ENGAGEMENT

SMR TRACK: A UTILITY UPDATE

A PAN-CANADIAN APPROACH

CANADIAN NUCLEAR ROADMAP

STREAM 1

- ON GRID
- READY NOW

Helping industries
switch to electricity



PARTNERSHIP
SELECTION
STAGE

STREAM 2

2 GRID-SIZE
REACTORS

- ARC100
- SSRW
- USED CANDU
FUEL
- CAN RECYCLE
THEIR FUEL
- WORK IN SYNERGY

STREAM 3

MICRO-REACTORS

- DECENTRALIZED
- GOOD FOR REMOTE
LOCATIONS (ex: MINING)
- EVINCI MICRO-REACTOR
 - PRODUCES HEAT & ELECTRICITY
 - PORTABLE!

- A NON-EMITTING
GRID BY 2050
- RETIRE ALL COAL
BY 2030
(IN SASKATCHEWAN)
- SASKATCHEWAN'S
FIRST SMR BY 2029

PARTNERSHIPS

ARE ESSENTIAL FOR:

- NAVIGATING POLICY
- BRINGING IN EXPERTISE
- FINANCING (PUBLIC & PRIVATE)

PAVING THE WAY FOR AN INTEGRATED APPROACH

FINANCING

- INDUSTRY PARTNERSHIPS
- INDIGENOUS INVESTMENT & PARTNERSHIPS
- GOVERNMENT SUPPORT (INNOVATION/NET ZERO)

- SMRS CAN SUPPORT OTHER
TECHNOLOGIES LIKE:
- LOW CARBON HYDROGEN
 - WIND ENERGY



GETTING
OUT THERE
EARLY

ENGAGING IN DIALOGUES
WITH COMMUNITIES



Iain HARRY

HEATHER
KLEB

KIM RUDD

PAUL
THOMPSON

ROBIN
MANLEY



GETTING REMOTE
COMMUNITIES OFF
OF DIESEL



SAFETY

RIGOROUS
INSPECTIONS &
EVALUATION
STANDARDS
SMRS HAVE
MORE ADVANCED
& PASSIVE SAFETY THAN
(already safe) CANDU



FIRST DEMO PROJECT WILL
BE IMPORTANT



SMR TRACK: THE FUEL CYCLE



CARLOS LORENCEZ



JEFF GRIFFIN



DEREK WILSON



STEVE BUSHBY

DEVELOPING THE...

SMR ECOSYSTEM

▷ SUPPLIER ▷ INDUSTRY
▷ REGULATOR

- ▣ CYBER SECURITY
- ▣ TRANSPORTATION
- ▣ POLICY
- ▣ BACK-END OF FUEL CYCLE
- ▣ PUBLIC EDUCATION + ENGAGEMENT
- ▣ OPERATIONS + INFRASTRUCTURE

THE SUPPLY CHAIN
WILL NEED TO ADAPT



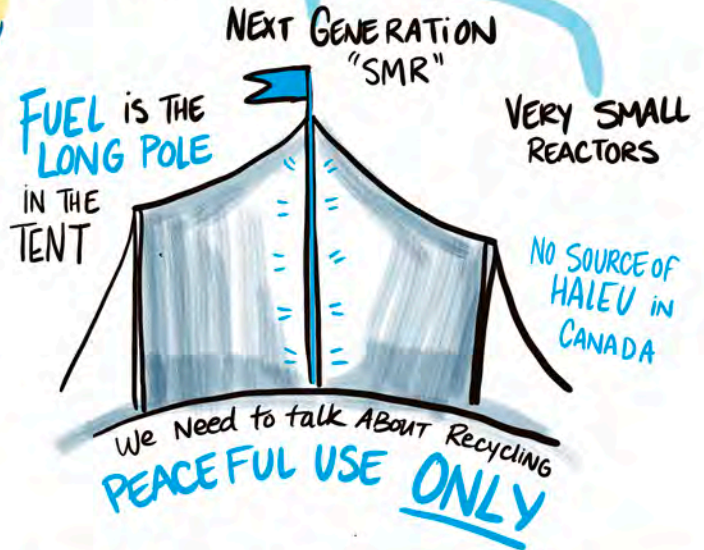
CANADA
Will eventually
Need to develop
PRODUCTS TO MEET
INTERNAL DEMAND
A STEPPED APPROACH



3 STREAMS
TO SMR
ON GRID
"CANDU"

CANADA IS A TIER 1
NUCLEAR NATION

We should
Be proud!



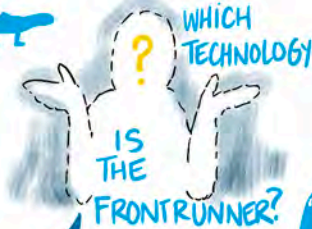
WASTE MANAGEMENT

- ▣ CONCERN IS THE SAME REGARDLESS OF SOURCE
- ▣ FUEL MUST BE DURABLE & CHEMICALLY STABLE
- ▣ FUEL MUST BE TRANSPORTABLE TO DISPOSAL SITE
- ▣ SITE MUST BE IN INFORMED, CONSENTING COMMUNITY

SAFETY IS #1

IT'S ABOUT ECONOMICS... THERE IS STILL WASTE FROM RECYCLING... THERE NEEDS TO BE A SAFE "GRAVE" OPTION

But we
Still Have
Gaps



WE'RE ENCOURAGING
COMPANIES TO
WORK WITH US
EARLY

But we will
ADAPT

"A CRADLE
TO GRAVE
APPROACH"

SAFETY

ENVIRONMENT

ECONOMY

INDUSTRY CEO PANEL



MIKE MARSH



KEITH CRONKITE



RUMINA VELSHI



KEN HARTWICK



STEPHANIE SMITH



MIKE RENCHECK

"WOMEN SHOULD BE ABLE TO LOOK UP DOWN & SIDWAYS AND SEE THEMSELVES REPRESENTED"

NUCLEAR IS PART OF THE SOLUTION

WHAT ARE THE SOCIAL BENEFITS of each decision?

DIVERSITY EQUITY & INCLUSION

Should Be part of OUR DNA

DIVERSE VOICES



HAVE MORE COMPLETE CONVERSATION

HOW DO WE USE EVERY SKILL, TALENT, IDEA IN THE INDUSTRY?

WE MUST BE DELIBERATE



DAWN PROGRAM

BUILDING STRONG RELATIONSHIPS WITH INDIGENOUS COMMUNITIES

THEY SHOULD BENEFIT FROM THESE INNOVATIONS



MEDICAL USE OF ISOTOPES ROBOTICS

ELECTRIFYING THE ECONOMY FOR NET ZERO

- ▶ EARLY & MEANINGFUL ENGAGEMENT
- ▶ PARTNERSHIPS & PROCUREMENT OPPORTUNITIES
- ▶ EMPLOYMENT, TRAINING, EDUCATION

EVERY INDUSTRY HAS WASTE

We are ACCOUNTABLE AND TRANSPARENT STEWARDS
"What happens to the waste from wind & solar?"

THIS IS OUR INDUSTRY'S CHALLENGE

- ▣ HIGHLY REGULATED
- ▣ WE HAVE PLANS & FUNDING TO RESPONSIBLY HANDLE WASTE (UNLIKE OTHER INDUSTRIES)



THE NEWER GENERATION IS THINKING OF GLOBAL IMPACTS and so are we.

INNOVATION & CREATIVITY

POLICY & FUNDING SUPPORT FROM THE GOVERNMENT IS KEY

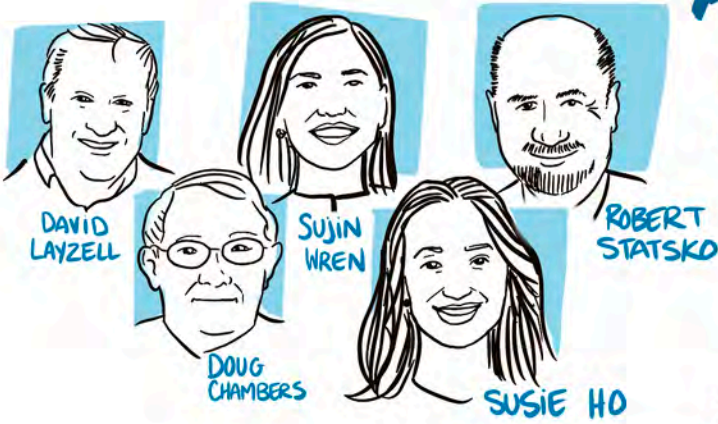
PROTECTING CANADIANS FROM RISK NOT FROM INNOVATION

Due to our culture of... **Collaboration**



IN TIMES OF NEED, WE STEPPED UP FOR OUR COMMUNITIES
▶ SANITIZATION & PPE FOR COVID
▶ POWER DURING HEAT WAVES

SMR TRACK: APPLICATIONS IN HYDROGEN



By 2030
Hydrogen will
play a significant
role in **CANADA'S ENERGY
STRATEGY**

74% of
All atoms
everywhere
are hydrogen

**REGIONAL
SOLUTIONS
ARE CRITICAL**

ELECTROLYSIS OPERATIONS
VARY FROM A FEW MWs TO
GIGAWATTS
of electricity Needs

**SMR is a
STEADY & RELIABLE
SOURCE**

DIESEL
FARM EQUIPMENT CARS, TRAINS
TRUCKS & SHIPS
AIRPLANES

REPLACING
SMR & ELECTROLYSIS CAN OBLITERATE!

METALURGICAL
COAL
NATURAL
GAS FURNACES

80-95%
Reduction
in EMISSIONS

BOTH BLUE
& GREEN
HYDROGEN

MADE USING
NUCLEAR
& RENEWABLE
ENERGY
MADE USING
BURNABLE
FUELS

SMR CAN MAKE
HYDROGEN COMPETITIVE

WE CAN!

BUT SHOULD WE?

WHICH AREAS NEED
IT? ex: SARNIA
Cleaner air

WE HAVE THE
TECHNOLOGY

BUSINESS
ENVIRONMENTAL
HUMANITARIAN

SWAP FUEL IN REMOTE
DIESEL-DEPENDENT
COMMUNITIES
▶ Heating Homes
▶ FUELING VEHICLES
▶ SAVE MILLIONS OF
LITERS OF DIESEL

**WE NEED A
CLEAN CHEMICAL
FUEL**

WE NEED

- ▶ POLICY
- ▶ LEADERSHIP
- ▶ A PRICE ON CARBON
- ▶ FRAMEWORKS
- ▶ TAX INCENTIVES
- ▶ INCENTIVES

**NET ZERO IS THE
MAIN DRIVER**

How quickly will industry
and government move
to **SCALE** the industry?
Manufacturers are
waiting for orders



Annalee Kornelsen | Drawing Change