



NATURAL RESOURCES CANADA - INVENTIVE BY NATURE

Class 43.1, Class 43.2 and CRCE

Presentation to
Marine Renewables Canada

May 4th, 2016
Webinar



Natural Resources
Canada

Ressources naturelles
Canada

Canada

Tax Incentives for Business Investments in Clean Energy Generation and Energy Conservation Equipment

- Businesses earning revenue have to pay **income tax**.
- Allowed to deduct expenses incurred to earn income.
(Revenue – Expenses = Taxable Income)
- In general, two kinds of expenses:
 - Current Expenses
 - Capital Costs
- Capital costs normally discounted (written-off) over time according to their expected useful life.



What are Classes 43.1 and 43.2?

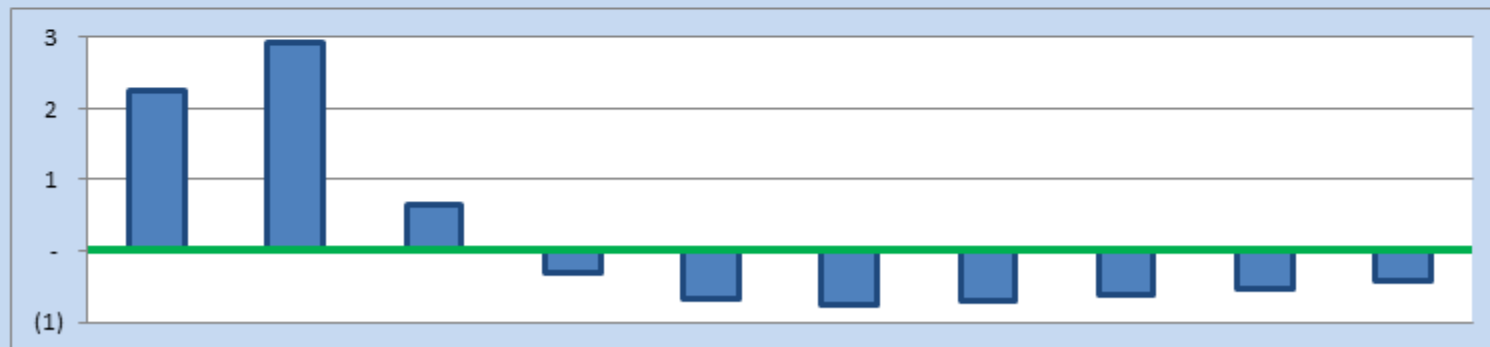
- Capital Cost Allowance (CCA) Classes in Canadian Income Tax Regulations (ITR).
- CCA Classes for:
 - “**clean energy generation and energy conservation equipment**”
- Class **43.1** CCA Rate = **30 %/year** (declining balance basis)
- Class **43.2** CCA Rate = **50 %/year** (declining balance basis)
- “Accelerated” CCA – provides financial incentive by deferring taxation. Allows businesses to reduce their taxable income in the early years of an assets operation by claiming a larger than usual depreciation.



Impact on Business Income Tax

Class 8 (20% CCA) vs. Class 43.2 (50% CCA)

YEAR	1	2	3	4	5	6	7	8	9	10
UNCLAIMED CAPITAL COST	100.0	90.0	72.0	57.6	46.1	36.9	29.5	23.6	18.9	15.1
CLASS 8 CCA (20%)	10.0	18.0	14.4	11.5	9.2	7.4	5.9	4.7	3.8	3.0
REDUCTION IN TAXES	1.50	2.70	2.16	1.73	1.38	1.11	0.88	0.71	0.57	0.45
UNCLAIMED CAPITAL COST	100.0	75.0	37.5	18.8	9.4	4.7	2.3	1.2	0.6	0.3
CLASS 43.2 CCA (50%)	25.0	37.5	18.8	9.4	4.7	2.3	1.2	0.6	0.3	0.1
REDUCTION IN TAXES	3.75	5.63	2.81	1.41	0.70	0.35	0.18	0.09	0.04	0.02
DIFFERENCE IN TAXES	2.25	2.93	0.65	(0.32)	(0.68)	(0.75)	(0.71)	(0.62)	(0.52)	(0.43)

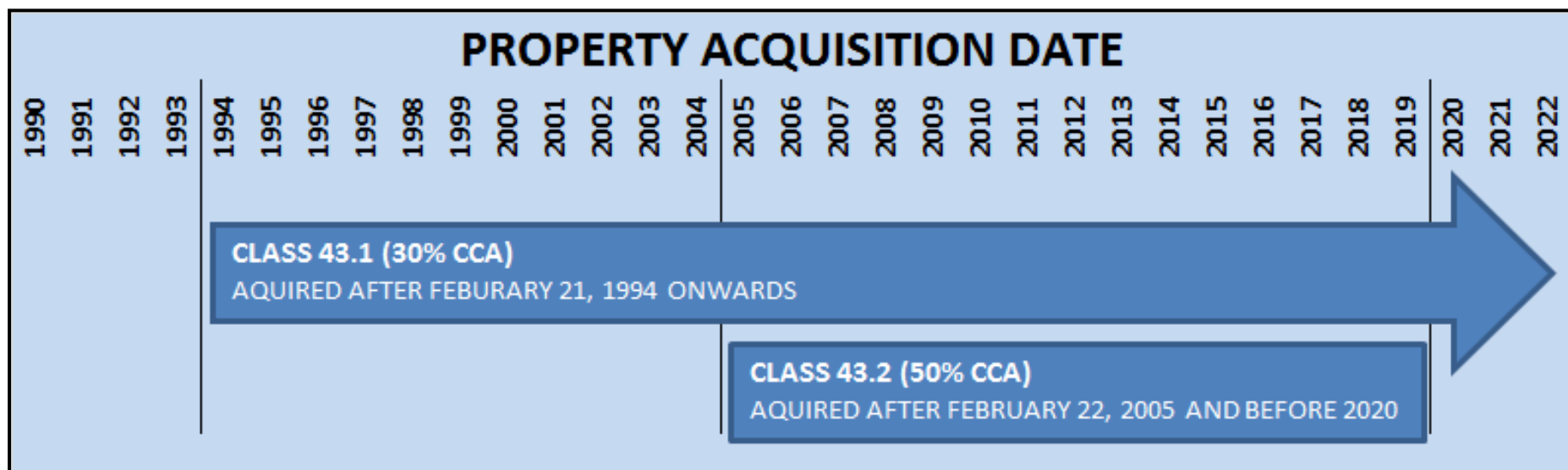


* SIMPLIFIED CALCULATION - ASSUMES MAXIMUM CCA BENEFIT AND 15% INCOME TAX RATE



Relationship between Class 43.1 & 43.2

- Class 43.2 eligibility depends, in part, on **date of acquisition**.
- In general, Class 43.2 includes all equipment described in Class 43.1 with **some exceptions**.
- For example, cogeneration and combined cycle systems with a heat rate greater than 4,750 Btu/kWh are excluded from Class 43.2.



What are Capital Costs?

- In general, all costs associated with the acquisition and installation of assets, including:
 - purchase price of machinery and equipment;
 - costs of design, engineering and commissioning of machinery and equipment;
 - legal, accounting, or other expenses related to the acquisition of the property; and,
 - costs of other services required to make a system operational.
- In the case of property that a taxpayer manufactures for the taxpayer's own use, capital cost includes direct manufacturing costs but no amount for profit.



Some CCA Rules

- **Available for use rule** - Deductions cannot be made until equipment is “available-for-use”
- **Half year rule** - Only $\frac{1}{2}$ of normal CCA rate may be claimed in 1st year

Example:

\$100k CC

50% DB

$\frac{1}{2}$ yr. rule

Year	UCC	Max CCA
1	100,000	25,000
2	75,000	37,500
3	37,500	18,750
Etc.		

- **Specified energy property rules** - CCA deductions for Class 43.1/43.2 property by passive investors are limited to income from such property

What Qualifies for Class 43.1/43.2

- The following 17 categories of systems, as listed in the Technical Guide to Class 43.1 and 43.2, are set out in Class 43.1 in the ITR:
 1. Cogeneration and Specified-Waste Fuelled Electrical Generation Systems
 2. Thermal Waste Electrical Generation Equipment
 3. Active Solar Heating Equipment and Ground-Source Heat Pump Systems
 4. Small-Scale Hydro-Electric Installations
 5. Heat Recovery Equipment
 6. Wind Energy Conversion Systems
 7. Photovoltaic Electrical Generation Equipment
 8. Geothermal Electrical Generation Equipment



What Qualifies for Class 43.1/43.2 (cont'd)

9. Landfill Gas and Digester Gas Collection Equipment
10. Specified-Waste Fuelled Heat Production Equipment
11. Expansion Engine Systems
12. Systems to Convert Biomass into Bio-Oil
13. Fixed Location Fuel Cell Equipment
14. Systems to Produce Biogas by Anaerobic Digestion
15. Wave or Tidal or Water Current* Energy Equipment
16. District Energy Systems/Equipment
17. Producer Gas Generating Equipment*
18. Electric Vehicle Charging Stations**
19. Electrical Energy Storage**

* Enacted in Budget 2014

** Announced in Budget 2016



What are Canadian Renewable and Conservation Expenses (CRCE)?

- Certain **project development expenses** –where it is reasonable to expect at least half of the capital cost of equipment to be used in the project would be the capital cost of equipment that is included in Class 43.1 or 43.2 – may qualify as CRCE.
- CRCE may be
 - deducted from income in the year incurred,
 - carried forward indefinitely and deducted in future years, or
 - renounced to investors under a flow-through share agreement.



What Qualifies as CRCE?

- For qualifying projects, CRCE (set out in ITR 1219) includes expenses such as the cost of:
 - Making a service connection for transmission of electricity insofar as such expenses are not for the acquisition of property;
 - Construction of temporary access roads to a project site;
 - Acquiring a right of access to a site during project development;
 - Clearing of land to the extent necessary for a project;
 - Process engineering for a project (includes collection of site data, system design, feasibility analysis, selection of components);
 - Drilling or completion of an exploratory well for a project; and
 - Wind turbines installed to test the wind (i.e. test wind turbines).



Technical Guides

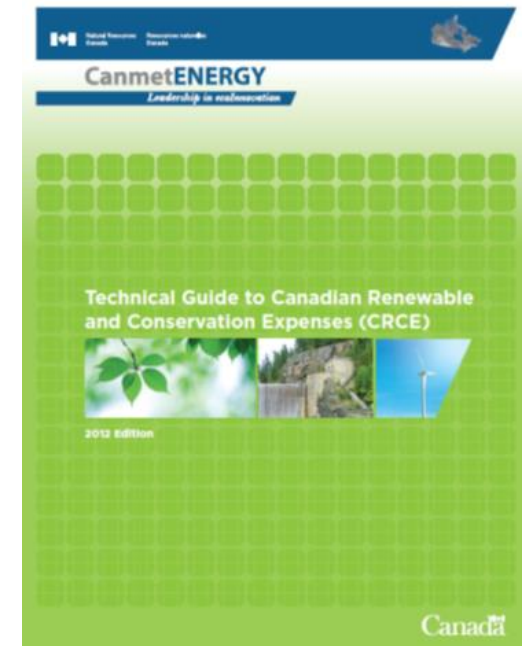
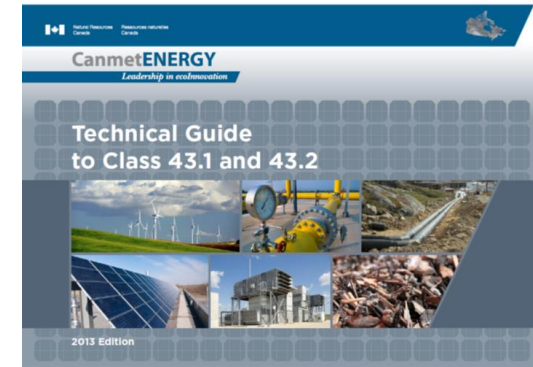
- Section 13(18.1) of the ITA requires that NRCan publish and amend from time to time a:

Technical Guide to Class 43.1 and 43.2

- Section 66.1(6) of the ITA requires that NRCan publish and amend from time to time a:

Technical Guide to Canadian Renewable and Conservation Expense (CRCE)

- Both of these guides apply conclusively with respect to engineering and scientific matters when determining eligibility



Technical Guide to Class 43.1 and 43.2 (2013 Edition)

Section 2.15 - Wave or Tidal Energy Equipment

■ Eligible Properties

- Support structures (e.g., mooring equipment, anchors, foundations and cable supports);
- Wave or tidal energy conversion equipment;
- Electrical energy generation equipment;
- Electric power conditioning equipment (e.g., AC/DC converters, DC/DC step-up and step-down converters and inverters);
- Control equipment (e.g., conversion equipment control, power control and SCADA equipment);
- Battery storage equipment*;
- Submerged cables and undersea collector hubs;

and

- Transmission equipment.



Technical Guide to Class 43.1 and 43.2 (2013 Edition)

Section 2.15 - Wave or Tidal Energy Equipment

■ Ineligible Properties

- Equipment that generates electrical energy using physical barriers (e.g., barrages) or dam-like structures;
- Buildings;
- Distribution equipment;
- Auxiliary electricity generating equipment;
- Vehicles;
- Telephone and related equipment;

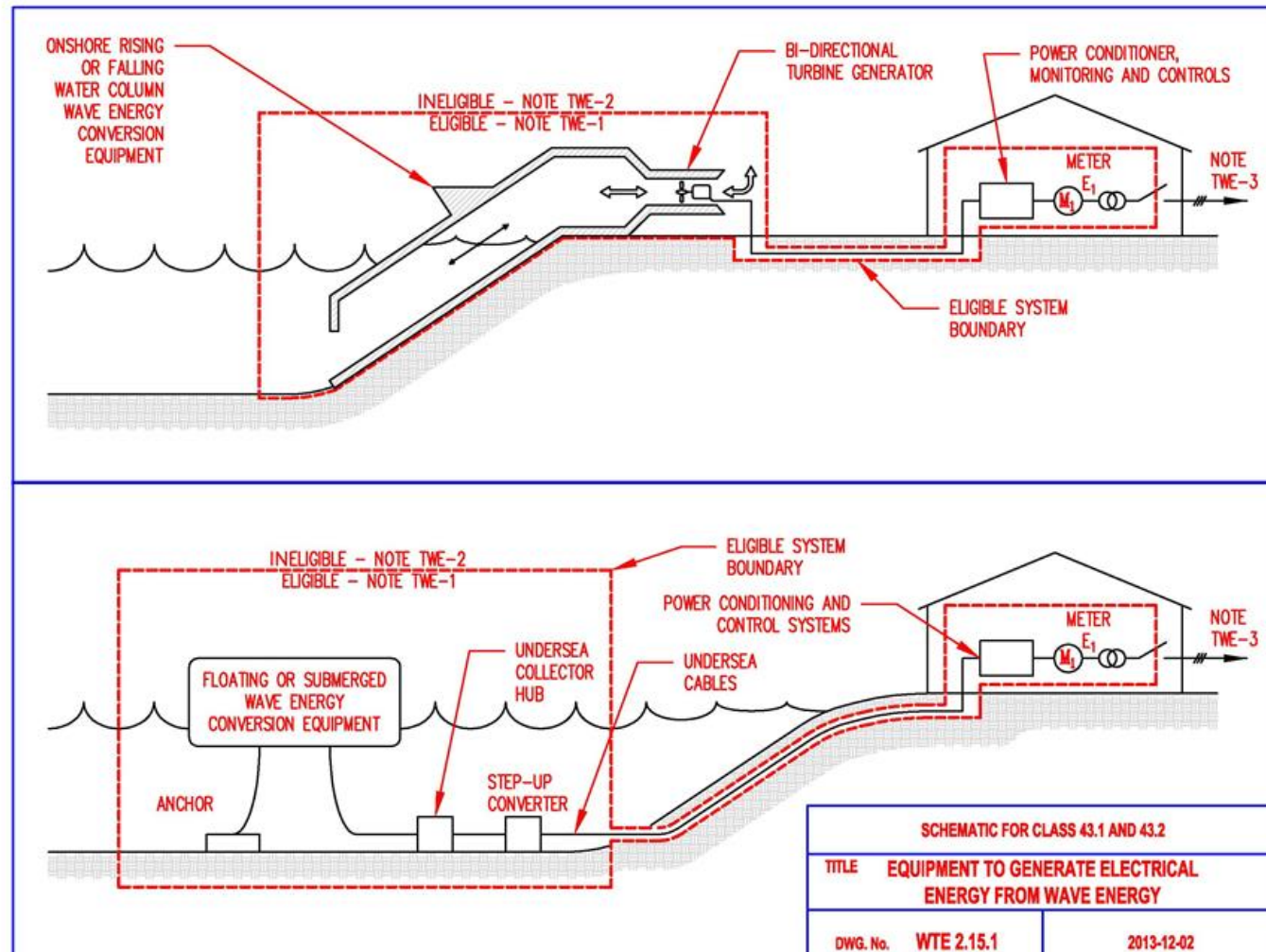
and

- Access roads, sidewalks, parking areas and other similar surface construction.



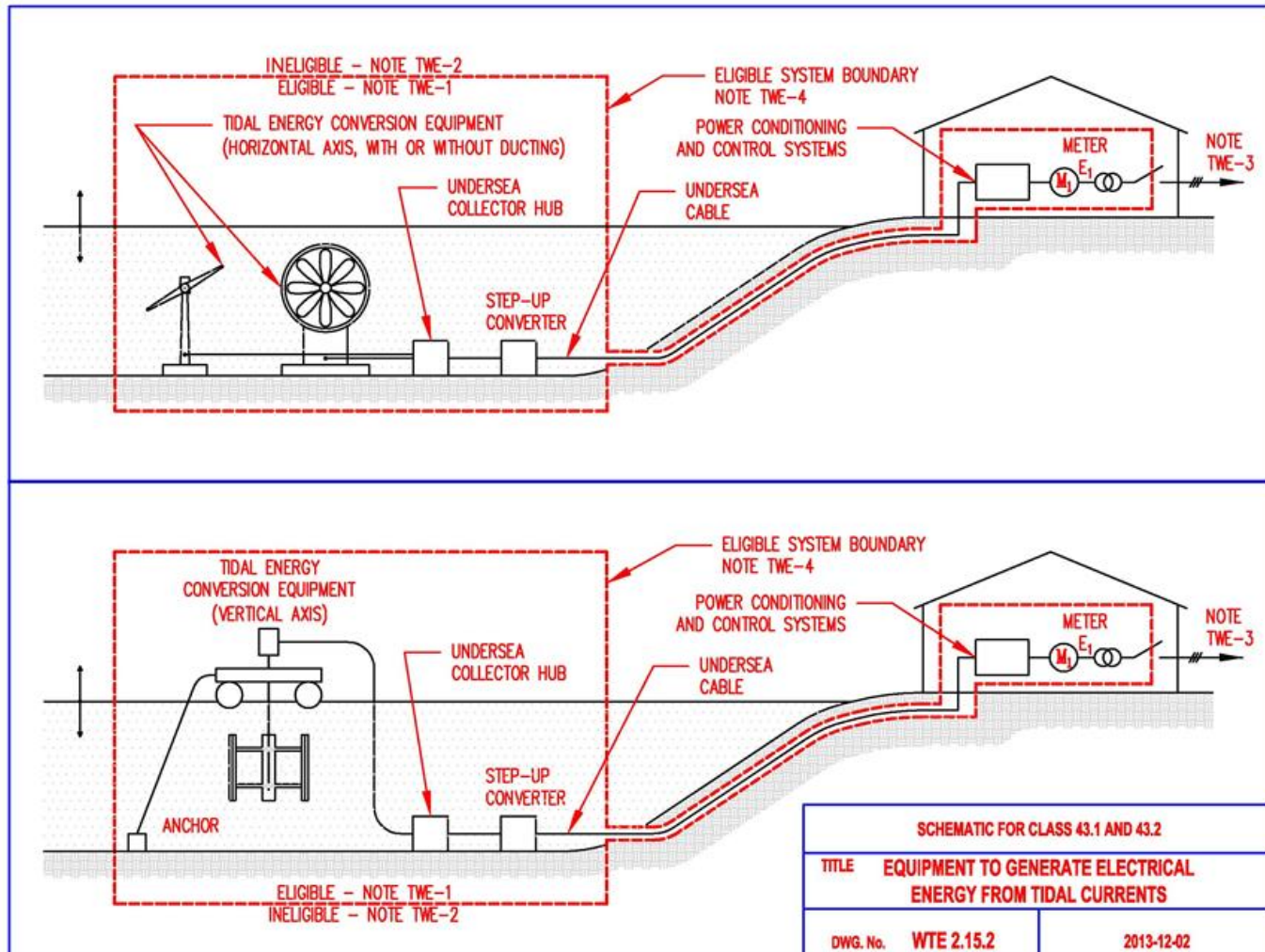
Technical Guide to Class 43.1 and 43.2 (2013 Edition)

Section 2.15 - Wave or Tidal Energy Equipment



Technical Guide to Class 43.1 and 43.2 (2013 Edition)

Section 2.15 - Wave or Tidal Energy Equipment



Technical Guide to Canadian Renewable and Conservation Expenses (CRCE) (2012 Edition)

PROJECT DEVELOPMENT ACTIVITIES TYPICALLY AVAILABLE AS CRCE PRE-FEASIBILITY STUDY ITEMS

- Identify and quantify market opportunities for the energy/output produced, as applicable (e.g. electricity, heat, digester gas, landfill gas, bio-oil, biogas).
- Obtain and analyze the data specific to the project as applicable:
 - Regional wave, tide and icing patterns.
- Conduct an initial negotiation for the sale of the particular energy/output produced (quantity, quality and value), as applicable.
- Determine the technology and capacity (quality, quantity, maximum, minimum, average) of the overall plant, array or recovery facilities as applicable.
- ...

FEASIBILITY STUDY ITEMS

- Market analysis: quantify the markets for the energy/output produced...
- ...



How to Obtain the Technical Guides

- The latest editions of the Technical Guide to Class 43.1 and 43.2 and the Technical Guide to Canadian Renewable and Conservation Expenses (CRCE) were published on the NRCan web site on December 12, 2014
- The technical guides may be downloaded in PDF format from the Tax Savings for Industry web page at NRCan
- Google “Tax Savings for Industry” or click on the following link:
 - <https://www.nrcan.gc.ca/energy/efficiency/industry/financial-assistance/5147>



Roles of Government Departments and Agencies

- Finance Canada
 - Develops tax policy and drafts the ITR

- Canada Revenue Agency (CRA)
 - Interprets and applies ITR for Class 43.1/43.2/ CRCE, final authority on tax administration matters

- Natural Resources Canada (NRCan)
 - Engineering and scientific authority for Class 43.1/43.2 & CRCE, publishes Technical Guides, give Technical Opinions



Technical Opinions & Advance Income Tax Rulings

- Taxpayers who wish to obtain a technical opinion as to whether equipment in a planned project will meet the engineering and scientific requirements of Class 43.1, Class 43.2 or CRCE may apply to the **Class 43.1/43.2 Secretariat** at NRCan for a Technical Opinion.
- Taxpayers who wish to determine if equipment they plan to use in a project will be eligible for inclusion in Class 43.1 and 43.2, may apply to the **Income Tax Rulings Directorate** at the Canada Revenue Agency for an Advance Income Tax Ruling.



Contact Information

Class 43.1/43.2 Secretariat:

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Ottawa ON K1A 0E4
Tel.: 613-996-0890

E-mail: nrcan.class43-1-categorie43-1.rncan@canada.ca

Income Tax Rulings Directorate:

Canada Revenue Agency
112 Kent Street, 12th Floor, Tower B
Ottawa, Ontario K1A 0L5
Tel.: 613-670-9064

E-mail: itrulingsdirectorate@cra-arc.gc.ca

