

# Overview and Issues with the Rules of Law for Energy Data Suppression and Confidentiality in Canada

For the Canadian Energy Data Workshop

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# Presentation overview

- ✓ Study context and issues
- ✓ Introducing the Canadian approach:
  - Introducing the *Statistics Act*
  - Overview of data collection mechanisms
  - The issue of confidentiality
  - Overview of data disclosure mechanisms
  - The Chief Statistician's discretionary powers
- ✓ Introducing the U.S. statistical system
- ✓ Further considerations



# Study context

- ✓ Energy transition
- ✓ Issue: Many provincial energy data collected by Statistics Canada are not published for confidentiality reasons
- ✓ Consequence: A lack of access to information that is deemed confidential, but is essential to understand the provinces' energy system

# Study issues

Review confidentiality standards under the *Statistics Act* to assess:

- ✓ **The balance between Statistics Canada's mandate and the principle of confidentiality**
- ✓ **The relationship between confidentiality and the objective of the *Statistics Act* to promote wide accessibility of data**

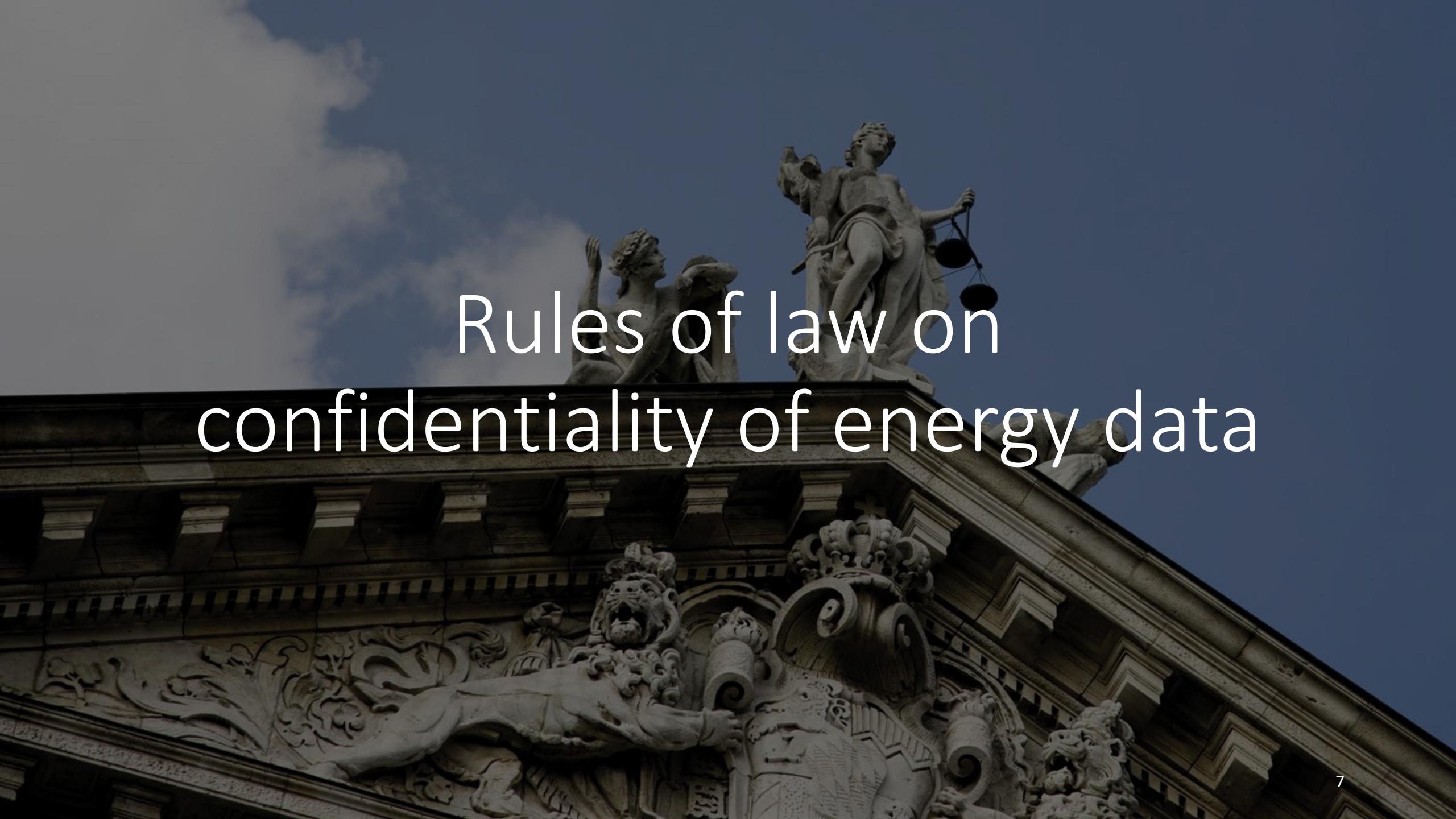


## Basis of the study

# Table accessed online on June 15, 2021

	Production sur le terrain, approvisionnement 2 3	Production nette des usines à carburant renouvelable, approvisionnement 4	Production nette des raffineries et des mélangeurs, approvisionnement 5 6 7	Importations, approvisionnement 8 9	Recettes inter-régionales nettes, approvisionnement 10 11	Ajustements, approvisionnement 12 13	Changement des stocks, utilisation 16 17	Intrants nets des raffineries et des mélangeurs, utilisation 5 6 7	Exportations, utilisation 9 18	Produits fournis, utilisation 19	Stocks de fermeture 17 20 21
<b>Produits</b>											
Liquides de gaz naturel	..	..	6 894	341	..	..	..	..	146 299	..	..
Éthane	..	..	0	0	..	..	..	..	..	..	..
Propane	..	..	21 054	7	..	..	..	..	144 857	..	..
Butane	..	..	-14 160	306	..	..	..	..	1 442	..	..
Pentanes plus 22	..	..	0	28	..	..	..	..	..	..	..
Oléfines de raffinerie	..	..	66	..	..	..	67	..	..	..	937
Hydrogène	..	..	..	..	..	..	..	0	..	..	..
Carburants renouvelables 13	..	x	..	3 800	..	..	5 517	49 160	1 004	..	86 143
Éthanol-carburant	..	x	..	3 797	..	..	6 280	49 187	..	..	40 417
Carburants renouvelables à l'exception de l'éthano	..	x	..	3	..	..	-763	-27	1 004	..	45 726
Autre hydrocarbures 23	..	..	..	..	..	..	6 888	-6 888	..	..	14 582
Pétroles non finies 24	..	..	..	..	..	..	11 280	33 100	..	..	159 282
Composants de mélange d'essence à moteur 12 25	..	..	..	10 940	..	..	-13 031	72 209	23 820	..	343 010
Composants de mélange d'essence d'aviation	..	..	..	..	..	..	0	0	..	..	0
Produits pétroliers finis	..	..	1 673 537	93 298	..	..	-43 628	..	414 170	..	991 022
Essence à moteur finie 14 26	..	..	737 318	3 168	..	..	-42 942	..	128 108	..	132 765
Essence d'aviation finie	..	..	0	..	..	..	0	..	159	..	0
Carburateur de type kérosène	..	..	-1 047	52 414	..	..	28 977	..	512	..	87 956
Kérosène	..	..	13 067	0	..	..	0	..	..	..	32 468
Carburant léger 15 27	..	..	707 753	0	..	..	37 929	..	210 912	..	430 356
Carburant lourd	..	..	55 651	0	..	..	-61 539	..	51 894	..	133 536
Matière première pétrochimique	..	..	39 387	..	..	..	-523	..	..	..	83 541
Naphtas spéciaux	..	..	0	..	..	..	0	..	..	..	0
Lubrifiants	..	..	48 438	504	..	..	1 395	..	1 113	..	31 959
Paraffines	..	..	0	96	..	..	0	..	255	..	0
Coke de pétrole	..	..	6 279	33 923	..	..	0	..	344	..	0
Asphalte	..	..	49 094	3 193	..	..	-6 915	..	20 873	..	57 979
Gaz de distillation	..	..	19 138	..	..	..	0	..	..	..	0
Produits divers 28	..	..	-1 541	..	..	..	-10	..	..	..	462

New table: accessed September 13, 2021



# Rules of law on confidentiality of energy data

# Canadian approach: Introducing the *Statistics Act*

- ✓ **The *Statistics Act* provides the legal framework** for the activities of Statistics Canada and the Chief Statistician
- ✓ **Legal force:** Binding rules
- ✓ **Act objectives:** Enable the collection and publication of data on the condition of the people of Canada and their activities, including:
  - ✓ Commercial
  - ✓ Industrial
  - ✓ Financial
  - ✓ Social
  - ✓ Economic
  - ✓ General



# Canadian approach: Introducing the Chief Statistician

- ✓ The Chief Statistician is appointed by the Governor in Council for a period of five years
- ✓ They advise departments and enforce the *Statistics Act*
- ✓ They decide on methods and procedures for statistical programs based on **professional statistical standards they consider appropriate** (s. 4(5) of the *Statistics Act*)

# Data collection mechanisms

**The power to collect data:** Statistics Canada can receive all the information necessary to collect, compile and publish statistics

**Determining whether requests for information are mandatory or not:** At the discretion of the Chief Statistician:

- 1) They do so in total transparency
- 2) They cannot determine whether requests are mandatory or voluntary in two cases: the Census of Agriculture and the Census of Population

# Confidentiality

Private nature  
of information whose  
access and dissemination  
are strictly limited to  
authorized personnel  
for a specific purpose

Concept:



Protects all  
identifying  
information of  
respondents to  
Statistics Canada surveys

Implications:



Prevents **disclosure** and  
**publication** of  
information and  
paradata

Consequences:



Produits	Production sur le terrain, approvisionnement 2 3	Production nette des usines à carburant renouvelable, approvisionnement 4	Production nette des raffineries et des mélangeurs, approvisionnement 5 6 7	Importations, approvisionnement 8 9	Recettes inter-régionales nettes, approvisionnement 10 11	Ajustements, utilisation	Changement des stocks, utilisation 12	Intrants nets des raffineries et des mélangeurs, utilisation 5 6 7	Exportations, utilisation 9 14	Produits fournis, utilisation 15	Stocks de fermeture 13 16 17
Liquides de gaz d'hydrocarbures,	..	..	x	..	..	..	..	..	..	..	..
Liquides de gaz naturel	..	..	x	341	..	..	..	..	146 530	..	..
Oléfines de raffinerie	..	..	x	..	..	..	67	..	..	..	x
Autres liquides	..	x	..	..	..	..	-19 706	x	..	..	x
Hydrogène	..	..	..	..	..	..	..	x	..	..	..
Carburants renouvelables	..	x	..	3 800	..	..	-7 634	x	1 004	..	x
Autre hydrocarbures 18	..	..	..	..	..	..	6 888	x	..	..	x
Pétroles non finies 19	..	..	..	..	..	..	11 280	x	..	..	159 282
Composants de mélange d'essence à moteur 20	..	..	..	10 940	..	..	-30 240	72 209	23 820	..	325 801
Composants de mélange d'essence d'aviation	..	..	..	..	..	..	0	x	..	..	x
Produits pétroliers finis	..	..	x	93 296	..	..	-29 177	..	413 534	..	x
Essence à moteur finie 21	..	..	x	3 168	..	..	-38 411	..	128 108	..	x
Essence d'aviation finie	..	..	x	..	..	..	0	..	159	..	x
Carburéacteur de type kérosène	..	..	x	52 414	..	..	28 989	..	512	..	87 968
Kérosène	..	..	x	0	..	..	0	..	..	..	x
Carburant léger 22	..	..	x	0	..	..	38 590	..	210 912	..	430 356
Carburant lourd	..	..	x	0	..	..	-52 281	..	51 894	..	142 794
Matière première pétrochimique	..	..	x	..	..	..	-523	..	..	..	x
Naphtas spéciaux	..	..	x	..	..	..	0	..	..	..	x
Lubrifiants	..	..	x	502	..	..	1 387	..	477	..	x
Paraffines	..	..	x	96	..	..	0	..	255	..	x
Coke de pétrole	..	..	x	33 923	..	..	0	..	344	..	x
Asphalte	..	..	x	3 193	..	..	-6 915	..	20 873	..	x
Gaz de distillation	..	..	x	..	..	..	0	..	..	..	x
Produits divers 23	..	..	x	..	..	..	-13	..	..	..	x
Légende des symboles:											
..	indisponible pour une période de référence précise										
x	confidentiel en vertu des dispositions de la Loi sur la statistique										

Example of confidential data

# How should confidentiality be interpreted?

Advocating for a broader interpretation of confidentiality:

- ✓ Connect confidentiality exclusively to information that relates directly to an individual, business or organization

Section 17(1)(b) of the *Statistics Act*: “No person who has been sworn under section 6 shall disclose or knowingly cause to be disclosed, by any means, any information obtained under this Act in a manner that it is possible from the disclosure to relate the information obtained **to any identifiable individual person, business or organization.**”

- ✓ Publishing a data suppression methodology does not compromise confidentiality

# Data disclosure and publication

## Difference

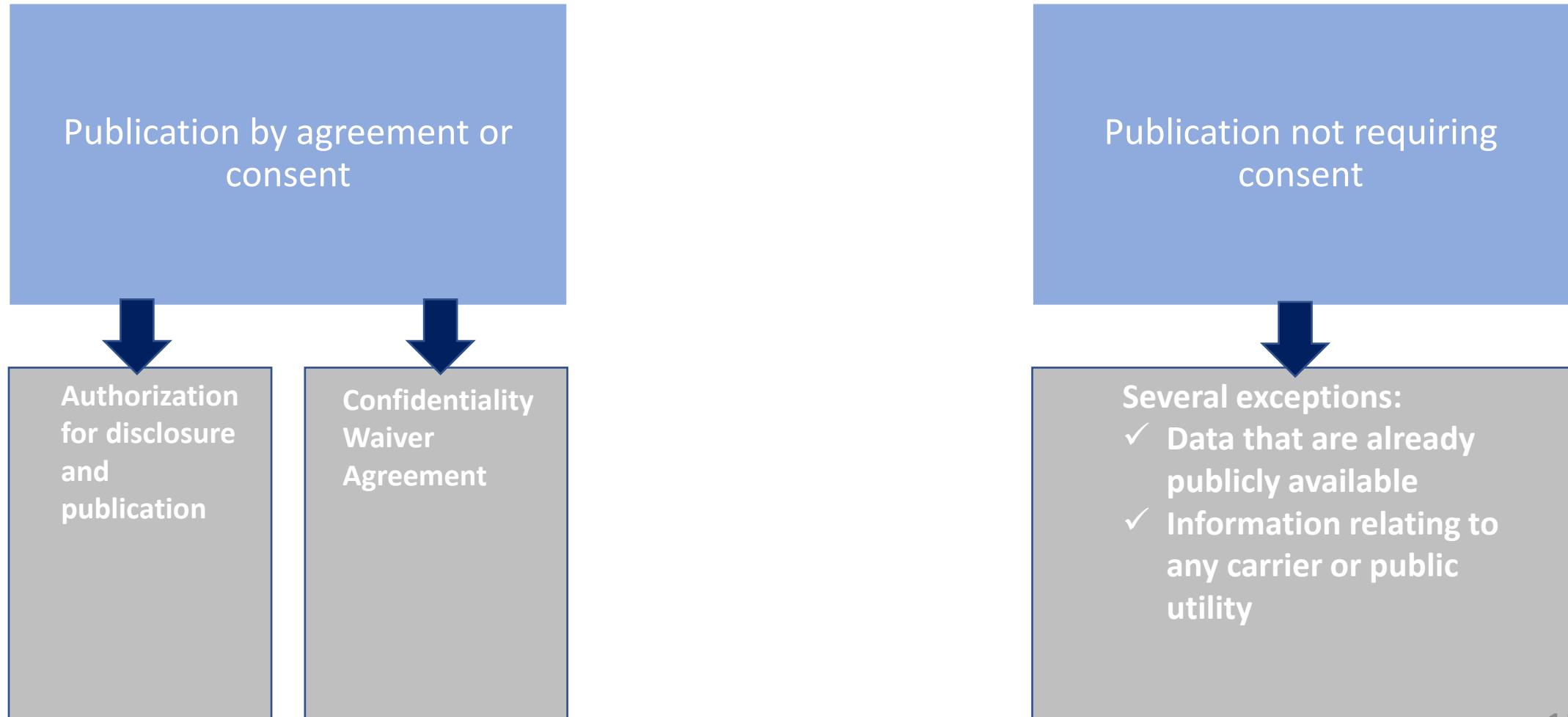
Data sharing agreements or arrangements

Exceptions to confidentiality

Allow data to be shared only between specific entities but do not allow publication

Allow dissemination and publication of data

# Exceptions to confidentiality



# The Chief Statistician's discretionary powers

The concept of discretionary powers applies in cases where the law does not dictate a specific decision, or where the decision maker is faced with a range of options within the limits imposed by the law

## Concept



The Chief Statistician can decide whether or not to act on a case-by-case basis

## Implications



# The Chief Statistician's discretionary powers

To make a decision, the statistician can take into account the context, but must:

- ✓ Always maintain a trust relationship with survey respondents
- ✓ Decide whether releasing data will harm individuals, organizations or businesses
- ✓ Determine whether published information constitutes an actual statistical need and is necessary for the public good

# Precedents: The concept of a decision's reasonableness

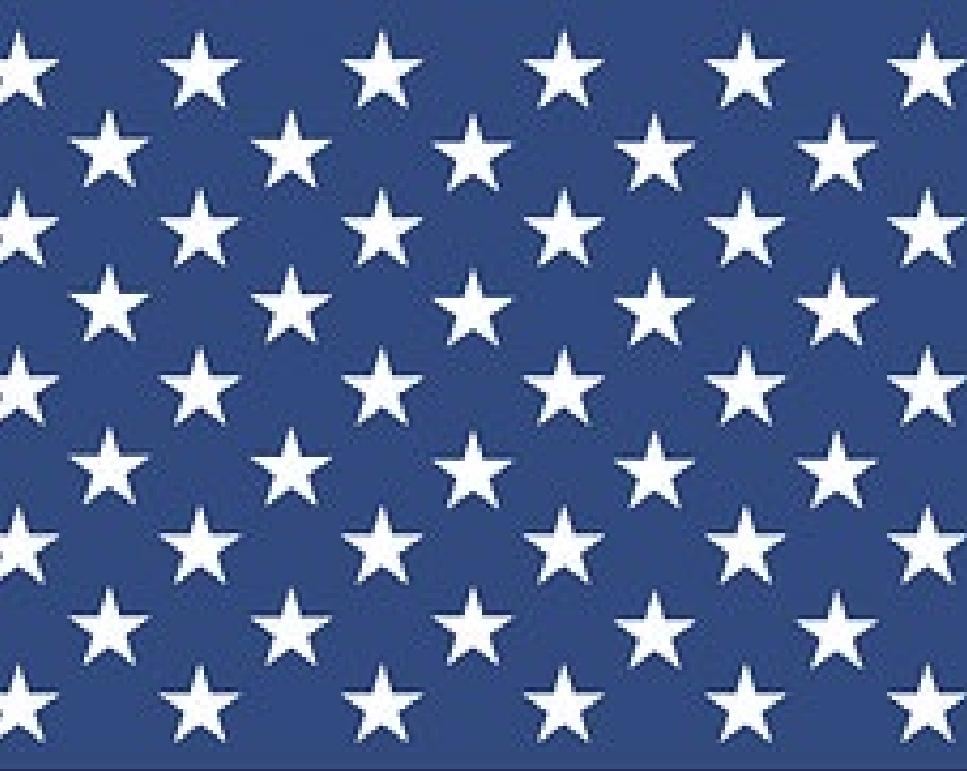
- ✓ In a 2019 decision, the Supreme Court of Canada established an interpretive framework for decisions made by a discretionary authority
- ✓ This is a general decision, not specific to the Chief Statistician
- ✓ Comments:
  - There is little precedent for reviewing a decision by the Chief Statistician to deny an exception to confidentiality
  - There is little additional information surrounding the Chief Statistician' decision making



## QUESTIONS

Could the Chief Statistician not use their power to release more data?

Could the Chief Statistician not also consider points such as the notion of trust, the public good and energy transition challenges?



## American approach

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- ✓ Decentralized system
- ✓ Specialized system

The statistical agency for energy statistics:  
Energy Information Administration

## U.S. legal system

Among others, there are two important statutes that establish the legal framework for statistics:

- ✓ *Paperwork Reduction Act*: Establishes the Office of Management and Budget (OMB)
- ✓ *Confidential Information Protection and Statistical Efficiency Act (CIPSEA) of 2002*: Provides minimum standards of confidentiality

The OMB has established **standards specific to statistics**: More direct governance of EIA activities

# Key differences between the Canadian and American approaches

Specialization

Power of leaders

Data availability

Transparency

Evaluation

# Further considerations

- ✓ Reform of Statistics Canada's interpretation of the terms of the *Statistics Act* to increase transparency and inclusiveness
- ✓ Reform of the *Statistics Act*

