



# Transforming Canada's cereals sector through value creation

Stakeholder engagement on value creation models  
Winnipeg, MB - November 16, 2018



# An overview of proposed 'made in Canada' value creation models

## End Point Royalties

- A *Plant Breeders' Rights Act* underpinned national non-refundable royalty payable on all harvested material (i.e., grain)
- Leverages the existing provincial check-offs system to collect the non-refundable royalty
- Royalties to be distributed to breeders based on their respective market share
- Need for a mechanism to provide rebates/exemptions, ensuring royalties not collected on production from certified seed

## Royalty Collection Enabled Via Contracts

- A *Plant Breeders' Rights Act* underpinned mechanism allowing for contracts where producers agree to farm saved seed conditions
- Purchasers of certified seed for eligible varieties agree to extended contract on farm saved seed use (e.g., agreeing to a 'trailing' royalty on farm saved seed)
- Participating producers report on their annual use of farm-saved seed as part of their contractual obligation
- Will require at least some degree of centralization in royalty collection and distribution

The *Plant Breeders' Rights Act* provides authority for regulatory amendments that would allow breeders and producers to enter into contracts where royalties are paid on farm saved seed use or to allow for endpoint royalties to be collected on harvested grain

# Key considerations

## Royalty type

- What type of royalty collection method should be chosen, and what varieties should be eligible?
- What kind of royalty rate is appropriate (uniform or variety specific?) and how should the rate be determined?

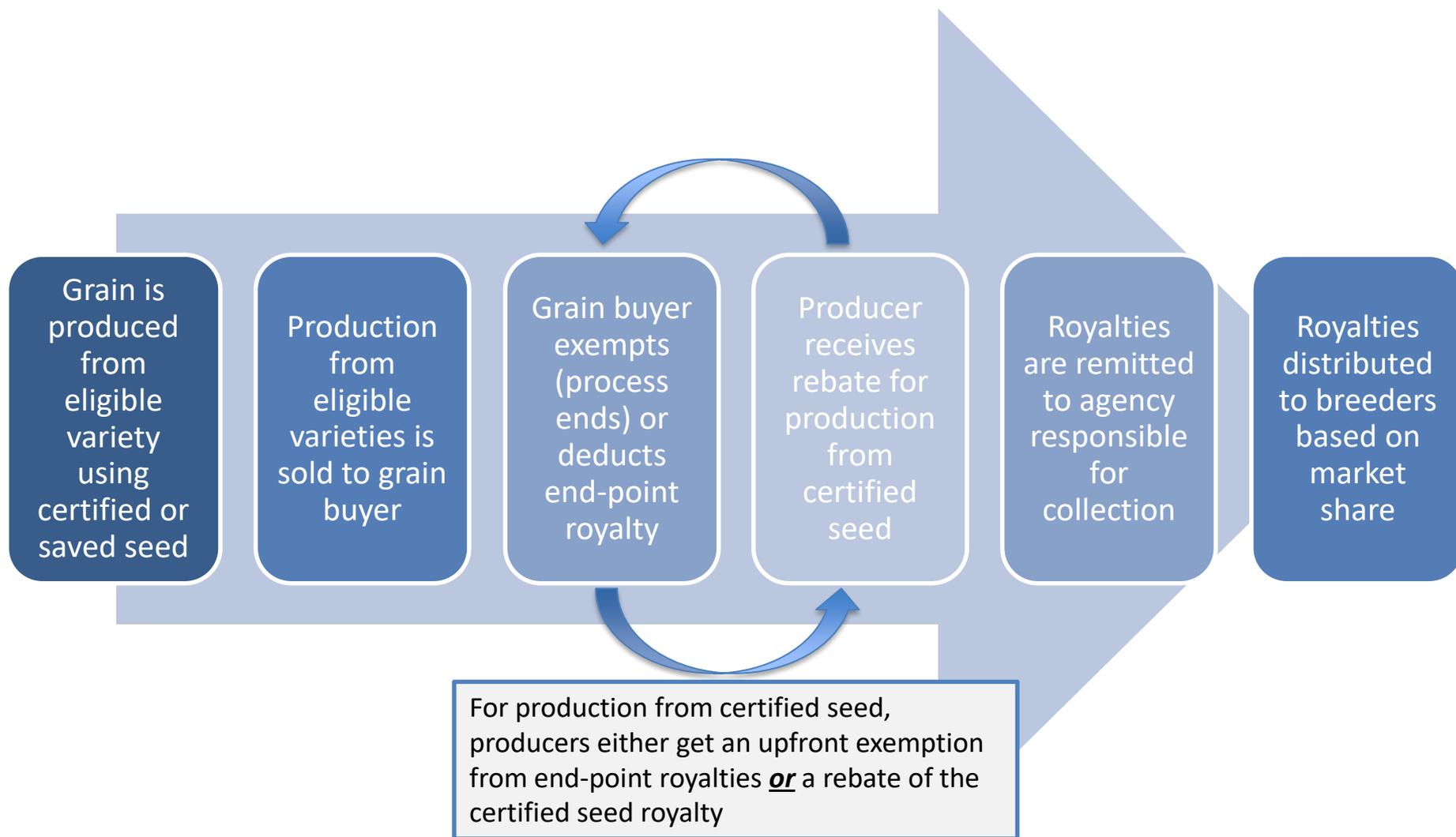
## Royalty collection and administration

- How should collection and distribution of royalty revenue be best managed?
- How should royalty rebates/exemptions be handled?

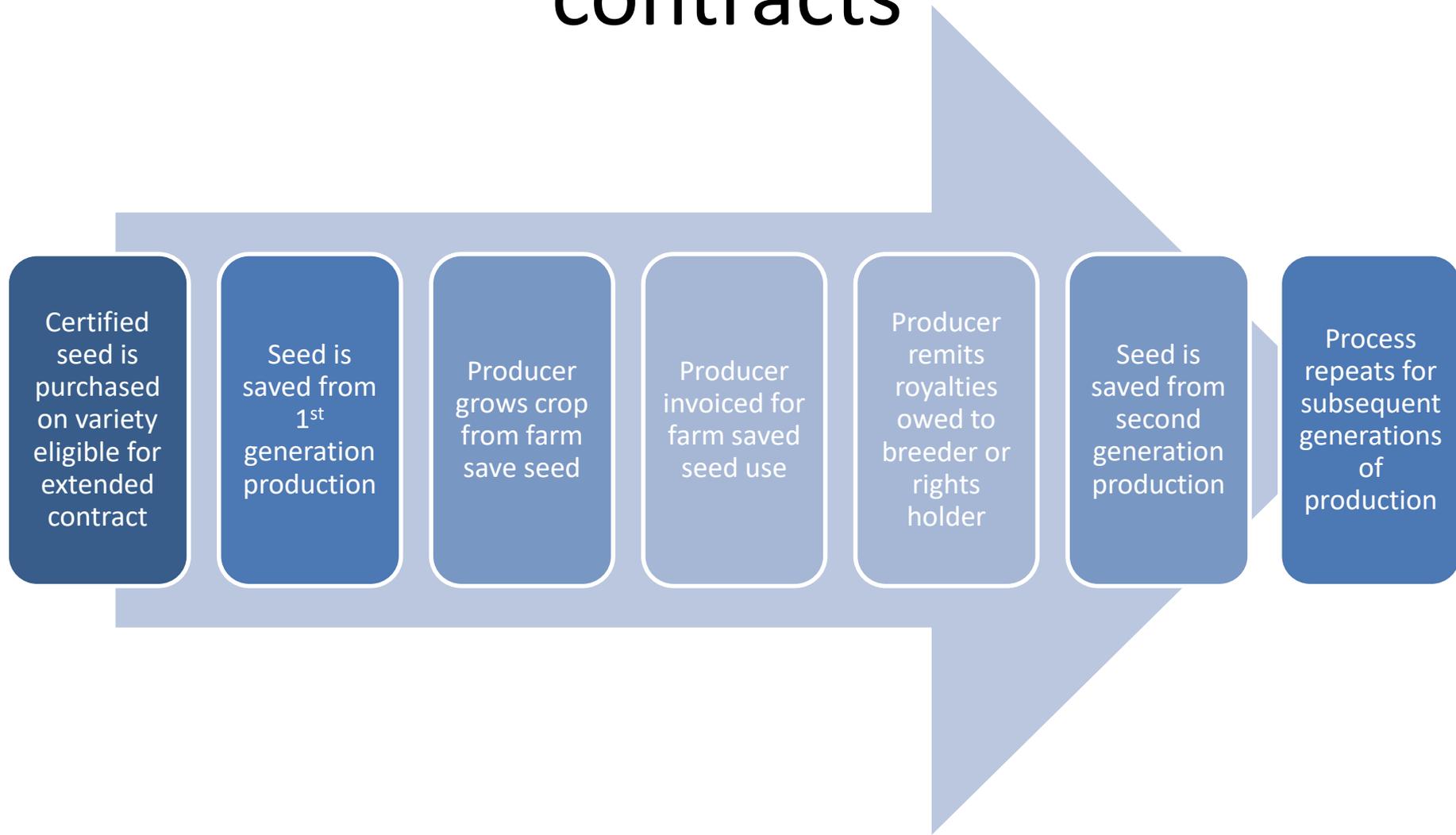
## Transparency and performance

- What measures should be put in place to ensure transparency?
- How can we measure the performance post-implementation of a new model?

# An overview of proposed 'made in Canada' models: end-point royalties



# An overview of proposed 'made in Canada' models: farm-saved seed contracts



# What is the appropriate royalty collection mechanism and type?

## Options\*

**A)** (i) Automatic deduction of end-point royalty by grain traders and/or (ii) breeders invoicing farmers based on declared harvest/farm saved seed use

**B)** Production farm saved seed contracts where producers agree to farm saved seed restrictions (trailing royalty or restrictions on use beyond first generation)

*\*Under either model, rates could be uniform across all eligible varieties; vary by specific class; or vary by individual variety (**See Annex**)*

## Australia

End-point royalties are collected upon delivery, with individual breeders setting rates and being responsible for royalty collection

- End-point royalty collection administratively similar to check-offs
- End-point royalty varieties priced to compete with royalty-free varieties

## France

A uniform national levy that is charged on the sale of all wheat varieties

- Collection of royalties where grain is delivered is administratively simple/transparent
- The low royalty rate limits potential ROI and investment but incentivizes farmers to adopt new varieties

## UK

Farmers must declare their saved seed use; royalties collected via a contractual agreement between breeders and growers

- Efficient (collecting 90% of royalties) but significant administrative costs (6-7% of revenue)

# Royalty rate(s): type, expression and level

## Options

**A)** Market forces (i.e., set by individual breeders)

**B)** Prescribe royalty rate in regulations under the *Plant Breeders' Rights Act* that is (i) uniform or (ii) one that applies to specific varieties\*

*\*To avoid violating the Competition Act, a uniform royalty rate would need to be set by government in regulation*

## Uniform or Variable

- Average royalty rate paid by producers for certified seed is approximately \$3.00 per acre/tonne
- Uniform end-point royalty or farm saved seed royalty priced lower than the certified seed royalty rate provides immediate/predictable revenue source. Variable rates may be more complex to administer but could, over time, lead to greater levels of overall investment/innovation
- If rates set too low, investment and adoption incentives could be less effective

## Expression of rates

- Rates can be expressed in \$/tonne, as a percentage of gross sales, or on a per acre basis

## Levels of investment

- Australia's end-point royalties range from \$1-4 per tonne for wheat; France's national levy is priced at 0.70 Euros per tonne
- As per EU law, UK farm saved seed royalties are priced 'sensibly lower' than certified seed (i.e., 52.5% of the weighted average royalty rate on certified seed grown the previous year)
- Canadian producers already pay deductions on grain delivered to elevators through check-offs (\$1/tonne)

# Potential approaches for collection & management of royalty revenues

## Options

### End Point Royalties

- A) Producer commission via existing check-off system
- B) A newly-established organization
- C) Individual breeders

### Production contracts

- A) Farmer declarations are dealt with by individual breeders
- B) Coordination among breeders on royalty collection/administration

### End-point royalties

- Existing organizations (commissions, Levy Central) have experience in collecting and distributing royalty revenue
- Reasonably straight forward for royalty collection to be integrated into existing check-off system
- Up-front exemptions or rebates (e.g., for production from certified seed) could create significant administrative burden
- Could be challenging for grain elevators to take on additional administrative requirements

### Production contracts

- Effective/efficient royalty collection requires coordination among breeders/rights holders and some centralization of related activities
- Existing organizations (e.g., the CPTA) could be in a position to play a coordinating role

# How can we measure performance/ensure transparency?

## Options\*

**A)** Use existing data (e.g., from Canadian Seed Trade Association) to determine performance of system on ad-hoc basis

**B)** Use *Plant Breeders' Rights Act* regulations to require (i) regular reporting on the performance in Plant Varieties Journal or (ii) to require annual reporting on the performance of the system to Parliament

*\*Existing authorities do not allow Government to compel industry to provide specific data on levels of investment*

## Considerations

- Possible indicators: levels of investment, the time it takes from first cross to commercial variety release, the rate of variety release, the uptake of new varieties, resources invested in plant breeding (e.g., breeders, technicians, support staff)
- Could be challenging to determine how implementation of a new model affects breeding activity, rates of release for new varieties and performance of new varieties
- Although breeders/developers consider specific investment proprietary information, aggregated data from CSTA members and commodity associations is available\*\*
- Significant latitude through the *Plant Breeders' Rights Act* to publish information on the performance of a new funding model on a regular basis
- Value chain (producers, breeders, seed growers, etc.) involved in oversight and decision making via Plant Breeders' Rights Advisory Committee

\*\*The CSTA already makes aggregated data available on a voluntary basis

# How should royalty rebates/exemptions be dealt with?

## Options

**A)** Upfront exemptions based on certified seed use\*

**B)** Rebate with demonstrated purchase of certified seed

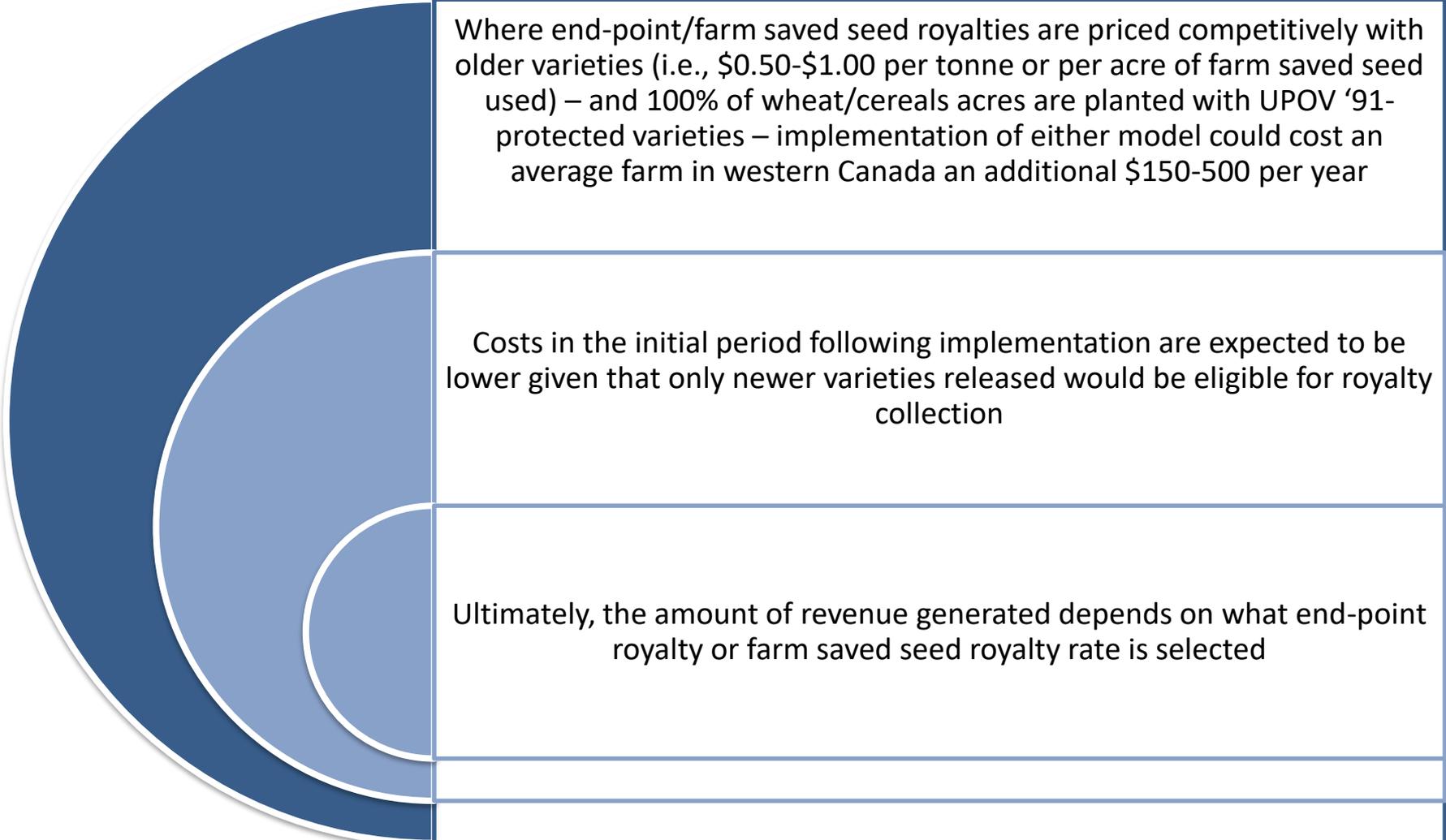
*\*Exemptions would require up-front work and it would be complicated to determine how much of delivered grain was produced from farm saved seed vs certified seed*

## Considerations

- Ensuring end-point royalties are only paid on grain produced from farm saved seed requires use of a rebate or exemption mechanism
- Stipulations in the *Plant Breeders' Rights Act* that prevent breeders from collecting a certified seed royalty and end-point royalty on the same seed production cycle
- Invoicing farmers based on declared farm saved seed use could eliminate need for rebates/exemptions, but could require significant verification, monitoring and enforcement efforts
- Under a production contract model, producers could agree to a range of terms (i.e., agree to use certified seed only, or use certified seed and pay trailing royalty on any derived from farm-saved seed), thus avoiding the need for rebates or exemptions\*\*

\*\*A regulatory requirement for farmers to declare their farm saved seed use may be required to underpin a production contracts model

# Preliminary analysis on cost to producers/revenue for breeders



Where end-point/farm saved seed royalties are priced competitively with older varieties (i.e., \$0.50-\$1.00 per tonne or per acre of farm saved seed used) – and 100% of wheat/cereals acres are planted with UPOV '91-protected varieties – implementation of either model could cost an average farm in western Canada an additional \$150-500 per year

Costs in the initial period following implementation are expected to be lower given that only newer varieties released would be eligible for royalty collection

Ultimately, the amount of revenue generated depends on what end-point royalty or farm saved seed royalty rate is selected

# Key questions for discussions 1 & 2

What do you like about the end-point royalty and farm-saved seed contract models?

Is there anything about either model that concerns you?

What are relevant considerations for setting the royalty rate; royalty collection and distribution; monitoring and enforcement; and other model features/elements?

**For any follow up questions or comments, please contact:**

**Carla St. Croix, Director** Innovation and Growth Policy Division, Strategic Policy Branch, Agriculture and Agri-Food Canada

- [Carla.StCroix@Canada.ca](mailto:Carla.StCroix@Canada.ca) or 613-773-1221

**Anthony Parker, Commissioner** Plant Breeders' Rights Office, Canadian Food Inspection Agency

- [Anthony.Parker@Canada.ca](mailto:Anthony.Parker@Canada.ca) or 613-773-7188

# Discussion 3: Which model is preferred

Overarching goal is to enhance sector competitiveness, profitability and innovation; with this in mind, is one model better or equally effective at:	Administrative simplicity	EPRs	<input type="checkbox"/>
		Contracts	<input type="checkbox"/>
		Equally effective	<input type="checkbox"/>
	Creating investment/adoption incentives (i.e., ROI clear producers and breeders)	EPRs	<input type="checkbox"/>
		Contracts	<input type="checkbox"/>
	Equally effective	<input type="checkbox"/>	
	Clarity and transparency (e.g., easy to understand/use and to see impact of dollars spent)	EPRs	<input type="checkbox"/>
		Contracts	<input type="checkbox"/>
		Equally effective	<input type="checkbox"/>
	Alignment with other mechanisms in place (e.g., certified seed, check-offs)	EPRs	<input type="checkbox"/>
		Contracts	<input type="checkbox"/>
		Equally effective	<input type="checkbox"/>
	Other...	EPRs	<input type="checkbox"/>
		Contracts	<input type="checkbox"/>
		Equally effective	<input type="checkbox"/>

# Annex - Lessons learned from other jurisdictions

	Approach	Lessons learned
<b>France</b>	<ul style="list-style-type: none"> <li>- Royalties are collected on harvested grain through a national levy that is charged on the sale of wheat upon delivery to the buyer</li> <li>- Royalty rate is limited by legislation</li> </ul>	<ul style="list-style-type: none"> <li>- System is efficient (only small amount of on-farm-consumed grain and small farm exemptions escape) and simple/inexpensive to administer</li> <li>- low, uniform rates reduce incentives to mis-declare, creates adoption &amp; investment incentives</li> </ul>
<b>UK</b>	<ul style="list-style-type: none"> <li>- Farmers are required to declare farm saved seed use with royalties collected via contractual agreements between breeders/growers</li> <li>- Royalty rate is limited by legislation</li> </ul>	<ul style="list-style-type: none"> <li>- While efficient (90% of royalties collected), administrative costs are significant (6-7% of revenue)</li> <li>- Seed cleaners collecting and remitting royalties is less practical in Canadian context</li> </ul>
<b>Australia</b>	<ul style="list-style-type: none"> <li>- Rates are set by breeders, and royalties are collected at the point of delivery, with breeders being responsible for royalty collection</li> <li>- Most royalties are automatically deducted where grain is sold/delivered</li> </ul>	<ul style="list-style-type: none"> <li>- Variable rates provide flexibility, but availability of older varieties kept rates low for up to 10-15 years and there is potential for mis-declaration</li> <li>- End-point royalties could be integrated into Canada's existing bulk handling and check-off systems</li> </ul>