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## INSTRUCTIONS FOR

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### STAGE TWO

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## Setting Research

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## Priorities for Alberta

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## Alberta Science and Research Authority Survey (ASRA)

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### **Contents of this Document**

The document is in two parts. The first part provides the instructions to complete Stage Two of this priority setting process. The second part contains a summary of the results of the Stage One Faxback Questionnaire.

### **Overview of Stages Two and Three**

The overall objective of Stage Two is to evaluate both the Attractiveness and Feasibility of all sixteen RAAs. To achieve this objective, Stage Two will consist of four regional workshops in Lethbridge, Calgary, Edmonton, and Grande Prairie. These workshops are for invited participants who have participated in the first round of the process. You should have received an invitation to attend one of these workshops to be held in late May or early June, depending on location. In preparation for these workshops, please review the background package, the QUICK FACTS, and complete the TWO PAGE Faxback Worksheet and Questionnaire. This Faxback Worksheet and Questionnaire asks respondents to rate each of the RAAs according to Attractiveness and Feasibility on a scale of one to ten. **The cutoff date for return of the Faxback Worksheet and Questionnaire is the 24th of May, 1996.\***

If you have not received an invitation or cannot participate in any of these workshops, please complete the Faxback Worksheet and Questionnaire that is included in this package and fax it back to us by May 24th, 1996\* so that the results can be incorporated as well. If you complete the Faxback Worksheet and Questionnaire, you will receive the final, third stage questionnaire. This third stage will see the results from both the workshops as well as the Stage Two Faxback Worksheet and Questionnaire mailed to all participants. In this final stage, after reviewing the ratings results you will be asked to re-score any of the RAAs that you feel have either been rated too low or too high.

\*If you cannot meet this deadline, please fax in your responses as soon as possible.

## The Contents of this Stage Two Package

This package consists of three components:

- a background “reference” document providing an overview of the 16 RAAs including:
  - a description of the RAA and key supporting disciplines
  - the current Alberta infrastructure
  - the current Alberta research activities
  - the national and international scope and context
  - current socio-economic impact
  - an overview of its attractiveness
  - an overview of its feasibility
- a “Quick Facts” overview highlighting each RAA. Participants with limited time can read this rather than the “reference” document before completing the Faxback Worksheet and Questionnaire.
- the summary of Stage One responses and instructions for completing the Stage Two Faxback Worksheet and Questionnaire. You are asked to rate each RAA in terms of Attractiveness and Feasibility.

## The Faxback Worksheet and Questionnaire

In terms of both Attractiveness and Feasibility, ASRA would like you to review each of the RAAs. Then, using a Likert scale (a scale from 1 to 10) please rate each RAA separately for Attractiveness and for Feasibility.

Please rate all 16 RAAs if at all possible. If you do not feel comfortable rating them all, please rate those that you do feel comfortable rating. Please keep a copy of this rating card for reference in the workshops and for the third and final stage. The cutoff date for return of this Faxback Worksheet and Questionnaire is the **24th of May, 1996.**

The Faxback Worksheet and Questionnaires will be tabulated and each RAA rated. These ratings will be provided to the workshop participants for use in their sessions.

## The Concept of Feasibility and Attractiveness

As you review both the Stage Two Background Report or the Quick Facts describing each of the RAAs, you should focus on the current Alberta research activities, the national and international scope and context, the current socio-economic impact and the attractiveness and feasibility. At a minimum read the Fast Facts to assist in your rating.

As a reminder, the following presents an overview of both Attractiveness and Feasibility.

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Attractiveness

- Potential socio-economic returns to Alberta from technical and knowledge advances
- Potential for Alberta to capture benefits and convert these into socio-economic returns

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Feasibility

- Science and research potential, meaning the scientific and/or technical potential to proposed work
  - Alberta’s ability to realize this potential through capacity, skills and infrastructure
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## Rating of Attractiveness and Feasibility

We would like you to use a ten-point rating scale for each category. The following tables may help you understand the 1 - 10 rating scale as it applies to each of the four categories.


Attractiveness		
<b>Potential Socio-economic Return</b>	High (7 - 10)	Successful research in this RAA would produce a “breakthrough”-type socio-economic benefit resulting in a huge leap forward in growth for the stakeholders involved (e.g. annual growth rate > 25%).
	Medium (4 - 6)	Successful research in this RAA would produce a significant but limited impact resulting in marginal growth or improvement for the stakeholders involved (e.g. annual growth rate more than 5% greater than the economy).
	Low (1 - 3)	Successful research in this RAA would produce only negligible impact resulting in limited improvement or growth for the stakeholders involved.
<b>Ability to Capture Benefits</b>	High (7 - 10)	Large, diverse implementation base with either a few dominant players or several major players. Excellent track record of successful technical innovation by implementers. Effective links between research and implementation.
	Medium (4 - 6)	Numerous major, highly competitive players, but none clearly dominant. Limited track record of technical innovation by implementers. Marginally effective links between research and implementation.
	Low (1 - 3)	No dominant players — sector dominated by numerous small, marginally competitive players. No proven track record of technical innovation by implementers. Links between research and implementation absent or, if present, not demonstrably effective.

Feasibility		
<b>R&amp;D Potential</b>	High (7 - 10)	Sufficient framework exists to support emerging research area so that, meaningful results can be expected, or mature research area but high likelihood of breakthrough.
	Medium (4 - 6)	Moderately long term or high investment required with only moderate potential for substantial technical advancement.
	Low (1 - 3)	Research area is either mature with little likelihood of substantial further development or very new and requiring large long term investment.
<b>R&amp;D Capacity</b>	High (7 - 10)	Critical mass of world-class researchers with supporting infrastructure in place. Highly effective inter-organizational collaboration.
	Medium (4 - 6)	Critical mass of world-class researchers but without adequate supporting infrastructure in place or sub-critical mass of world-class researchers.
	Low (1 - 3)	Absence of world-class researchers.

### How to Calculate Your Ratings

To complete the calculations, you will need to use the attached Faxback Worksheet. The following example demonstrates the rating system. In the example using the RAA — Agriculture and Related Products, you should start with Attractiveness. Read the scoring for Potential Return and select a rating (e.g. 8.0) followed by a rating for Ability to Capture Benefits (e.g. 5.0). Enter these into the respective columns and then multiply the two to obtain your score. Follow the same procedure for Feasibility. In the example, we selected 8.0 and 9.0, both relatively high scores. This should then be multiplied to obtain the aggregate score of 72. It is important that you provide not only the final aggregate scores for Attractiveness and Feasibility but the raw scores as well. They can be used to assist in determining where to increase support to make an RAA more likely to succeed in the future.

**Figure 2**  
**Example For Rating Each RAA**

RAAs	Attractiveness				Feasibility			
	Potential Return	X	Ability to Capture Benefits	= Attractiveness Rating	R&D Potential	X	R&D Capacity	= Feasibility Rating
 1. Agriculture and Related Products	8.0	X	5.0	= 40.0	8.0	X	9.0	= 72.0