## Information for the Respondent

## Purpose of Survey

Statistics Canada is conducting this survey to produce a profile of firms engaged in the deveroment or production of bioproducts in Canada. The survey focuses on the key characteristics and activities fing that develop or produce bioproducts as part of their company's activity.
Bioproducts are an emerging sector of the Canadian economy and their impact thas the potential to be felt through all parts of the Canadian society. An accurate understanding of bioproducts requike comprehensive data. Information from this survey may be used by businesses for economic or market ana performance, government departments and agencies to assist policy formation, and by the academic community for research purposes.

Please report data for 2003 fiscal year for bioproducts development orjoroduction activities of your firm in Canada unless a specific question asks otherwise.

## Authority

Collected under the authority of the Statistics Act, rived Statutes of Canada, 1985, Chapter S-19. Completion of this questionnaire is a legal requirement under the Statisfics Act.

## Confidentiality

Statistics Canada is prohibited from pabhishingathy statistics that would divulge information obtained from this survey that relates to any identifiable bysinegs, institution or individual. Data are treated in strict confidence, used for statistical purposes and releaged in aggregate form only. The confidentiality provisions of the Statistics Act are not affected by either the Access to xntornzalion Act or any other Legislation.

## Who should completethis questionnaire?

A knowledgeable seniorpersan in your firm, such as an R\&D manager or production manager, can complete this Assistance
If you have questighs or require assistance please contact:
Tel: 1-888-820-1169 or
Fax: 1-888-869-0972
Email: sieidinfo@statcan.ca

## Please provide the following information:



5-5300-506.1: 2004-08-25 STC/SAT-465-75366

This section measures your firm's use of biomass and its bioproducts development or production activities.

1. Bioproducts Development and Production

A bioproduct is defined as a commercial or industrial product (other than food, feed and medicines) made with biological or renewable agricultural (plant, animal) marine or forestry materials.
a) Does your firm produce or develop bioproducts?
(please, refer to the table below for examples of bioproducts)
1001 3

b) In the table below, please indicate the number of bioproducts your firm currently has for each stage of development:

2. Use of biomass by your firm

Biomass is defined as remenable or sustainable feedstock/materials of agriculture, animal, forestry, marine or aquaculture origins or froon municipal and industrial waste.
a) Does your firm usebbiomass? (please refer to the table below for examples of biomass)

b) In the table below, please indicate the types of biomass used by your firm (check all that apply).

| 2010 | Agricultural crop biomass: crops and crop residues, <br> dedicated energy crops (switchgrass, wheatgrass, silver maple, hybrid poplar, cottonwood, etc.), <br> industrial crops (flax, hemp, canola, corn, etc.) |
| :--- | :--- | :--- |
| 2020 | Forestry biomass: forestry products/slash; mill waste/residues, wood and wood residues |

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If your firm develops or produces at least
one type of bioproducts listed in 1 b)
OR
If your firm uses at least one type
of biomass listed in 2b)
of biomass listed in 2 b )
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Please return the questionnaire in the accompanying prepaid envelope. Thank you for your collaboration.

- Go to question 3

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If your firm does not develop or
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If your firm does not develop or
produce any bioproducts listed in 1 b)
produce any bioproducts listed in 1 b)
AND
AND
If your firm does not use any biomass listed in 2 b )
listed in 2b)

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Is the principal biomass input used by your firm a:
(Please check one)
3001Primary product (e.g. soybean, corn, hemp, flax, etc.)
3002
By-product (e.g. straw, fat, etc.)
3003
Recycled product (e.g. cooking oil, industrial sludge)
4. How far (in km) is your firm from its principal source of biomass

5. Does your firm get or purchase its biomass orincipally from a:

5001
Domestic source (including production \& biomass as a result of your firms' activities)

5002
Foreign source (outsid』@canada
6. Is (are) your firm's bioproduct(s):
(check all that apply)
6001
Sold directlyto consymers or distributors
6002
Sold to other firms to be used as input(s)
6003 Produced for internal use
7. a) Are the bebproducts development or production activities of your firm located at an address other than that on the questionnaire?

b) Please provide the address of the location of the bioproducts development or production activities. If more than one location, please provide the address to the location where these activities mostly take place.


\section*{Section 2 - Benefits from developing or producing bioproducts}
8. Please rate the importance of the following benefits obtained by your firm as a result of developing or producing bioproducts.


\section*{Section 3 - Barriers to developing or producing bioproducts}
9. Please indicate the importance of the following barriers yormexperienced in the development or production of bioproducts by your firm.


\section*{Section 4 - Firm Characteristics}
10. What year did your firm become engaged in bioproducts-related activities?

10001 \(\qquad\)
11. How did your firm become involved in developing or producing bioproducts? (Please check one)
\({ }^{11001}{ }^{11002}\) Mainly as a result of activities of your firm (as part of an R\&D project)
12. a) Is your firm a spin-off? A spin-off is defined as a new firm created to transfer and commercialize inventions and technology developed in universities, firms or government laboratories.

b) Is your firm a spin-off from:
\begin{tabular}{ll}
12010 & University \\
12020 & Another firm \\
12030 & Government Agency/lab \\
& 12040 \\
& Other, please specify:
\end{tabular}
13. Is your firm a subsidiary of a Multi-National Enterprise (AXNE)
\(13001{ }^{3} \bigcirc\) No
\({ }^{1} \bigcirc\) Yes
14. Are the shares of your firm traded on thestock market?

15. What is the majority støck owgership of your firm?


\section*{Section 5 - Huynan resources in bioproducts development or production}
16. For the purpose of this survey Employees are defined as those workers for whom you completed a Canada Revenue Agency T-4 statement for the 2003 tax year. Include working owners. Do not include students. Only count employees working in Canada. If an employee performs more than one duty, report their primary responsibility. Count each person only once.
\begin{tabular}{|c|c|c|c|}
\hline ease report typical employment & 2003. If ' 0 ' (zero) indicate ' 0 . & & Number of employees in 2003 \\
\hline Total number of employees in Canada & & 16001 & \\
\hline Number of employees with bioproducts-related responsibilities: & Scientific research and development (e.g. scientists, R\&D managers, industrial postdocs, etc.) & 16002 & \\
\hline & Technicians & 16003 & \\
\hline & Management/marketing/finance/production & 16004 & \\
\hline & Other, please specify: & 16005 & \\
\hline & & & \\
\hline
\end{tabular}
17. Please rate the importance of the following factors on your efforts to fill bioproducts-related vacancies


\section*{Section 6 - Firm Financial Profile}

Revenues and Research \& Development (R\&D) Expenditures
18. Please complete the following table. If information is not available please proviole a carefully considered estimate. Report data for fiscal years.
If ' 0 ' (ZERO) please indicate ' 0 ', do not leave blanks.


\section*{Section 7 - hntellectual Property}
19. a) Forbiokroducts Currently under development or in production, did your firm apply for / acquire / license in the IP rights?

b) Which of the following describes the intellectual property rights obtained?
(check all that apply)
19010
Licensing agreement
19020 Patent assignment
19030 Other, please, specify:
c) Were the IP rights acquired from:
19040
Canadian firms or organizations
19050
Foreign firms or organizations

\section*{Section 8 - Business Practices}

Contracting Out
20. a) Did your firm contract out bioproducts-related activities in 2003?


Please indicate the number of contracts for each type listed:
\begin{tabular}{|lr|r|}
\hline \multicolumn{1}{|c|}{ Partner Type } & Number of Contracts \\
\hline Private research lab & 20010 & \\
\hline University & 20020 & \\
\hline Government Lab & 20030 & \\
\hline Foreign Firm & 20040 & \\
\hline Other, please specify: & 20050 & \\
\hline
\end{tabular}
b) For the fiscal year 2003, what was the total value of these bioproducts-related contracts?

20002 \$
\$ ,000

\section*{Collaborative Arrangements}

Collaborative arrangements involve the active participation in projects between your connany and other companies or organizations in order to develop and/or continue work on new or significantil y innpobved bioproducts processes or products. Pure contracting-out work is not regarded as collaboratiom.
21. Was your firm involved in bioproducts-related collaborative arrangements-with other companies or organizations in 2003?


Provide the number of arrangements by purpose and partnentybey:


\section*{Collaboration with foreign partners}
22. In 2003, was your firm involved in bioproducts-related collaborative arrangements with foreign partners?


Please rate the following purposes in your decision to form a collaborative arrangement with a foreign partner.


\section*{Section 9 - Raising Capital}
23. a) Did your firm attempt to raise capital, including government funding, for purposes related to bioproducts in 2003?

b) Why did you attempt to raise capital?
(Indicate each category that applies to your firm.)
\begin{tabular}{lll}
23010 & \(\bigcirc\) & R\&D purposes/expand R\&D capacity \\
23320 & \(\bigcirc\) & Proof of concept/pilot project \\
23030 & \(\bigcirc\) & Regulatory expenses \\
23040 & \(\bigcirc\) & Production/manufacturing capability \\
23050 & \(\bigcirc\) & Operating capital \\
23060 & \(\bigcirc\) & Repay current investors \\
23070 & \(\bigcirc\) & Other, please specify:
\end{tabular}

23070 Other, please specify:
24. a) Were you successful in raising capital?
\(24001{ }^{3} \bigcirc\) No Go to question 26 .
\({ }^{1} \bigcirc\) Yes
b) How much capital did you raise in 2003 ?
\[
24002 \quad \$ \quad, 000
\]
25. What percentage of your target did you reach?
25001 \(\qquad\) \% If \(100 \%\), Go to question 27
26. What reasons did the lender(s) give in limiting oxretusing your request for capital?
26011\bigcirc Further product development or arogf of concept required
26011\bigcirc Further product development or arogf of concept required
26022 Bioproduct not market-rady 
26022 Bioproduct not market-rady 
26003 No proof of market deman< 
26003 No proof of market deman< 
2604 \bigcirc Insufficient specific mmasement skills/expertise
2604 \bigcirc Insufficient specific mmasement skills/expertise
2 6 0 0 5 \text { Capital not avaikBDe duello capital market conditions}
2 6 0 0 5 \text { Capital not avaikBDe duello capital market conditions}
26006 Intellectual propertyprotection is not available for firm's technology in Canada
26006 Intellectual propertyprotection is not available for firm's technology in Canada
26007 Other, pleasespecify:
26007 Other, pleasespecify:
27. What sources provided capital?


\section*{Section 10 - Government Support Programs}
28. a) In the past 5 years, did your firm apply for benefits for bioproduct related activities under the Scientific Research and Experimental Development (SR\&ED) tax program?

b) How much did you apply for in 2003?

28002 \$
,000
c) What are your cumulative credits?
\({ }^{28003}\) \$ ,000
29. During the last three years, did your firm use any of the following types of programs sponsored by the federal or provincial/territorial governments for activities related to the development or production of bioproducts? (Please check all that apply.)
\begin{tabular}{|c|c|c|c|}
\hline \multirow[t]{2}{*}{of bioproducts? (Please check all that apply} & & \multicolumn{2}{|c|}{Government Programs} \\
\hline & & \begin{tabular}{l}
Federal Government
\(\qquad\) \\
1
\end{tabular} & Provincial/Territorial/ Municipal/Government
\(\qquad\) \\
\hline \multicolumn{2}{|l|}{Technology support and assistance programs 29010} & & 4 \\
\hline Loan guarantees & 29020 & & 170 \\
\hline \multicolumn{2}{|l|}{Export assistance programs \({ }^{29030}\)} & & \\
\hline \multicolumn{2}{|l|}{Information or Internet services 29040} & \[
\backslash
\] & \\
\hline \multicolumn{2}{|l|}{Support for training \({ }^{29050}\)} &  & \\
\hline Other, please specify: & & 2 & \[
\bigcirc
\] \\
\hline
\end{tabular}

Section 11 - Strategies Used in 2003

31. Approximately, how many minutes did you spend collecting the data and completing this questionnaire?
31001 \(\qquad\) minutes


Thank you for your assistance.```

