

Facesheet

(Tick ✓ one) **Project seeking APEC funding** **Progress Report** **Evaluation Report**
 (Tick ✓ one) () **Operational Account** (X) **TILF Special Account** () **Self-funded Project**

Project number: <i>(To be filled in by Secretariat)</i>		Date received by Secretariat:	Late / Not late <input type="checkbox"/> <input type="checkbox"/>
Name of Committee/Working Group: Expert Group on Minerals & Energy Exploration & Development (GEMEED)/Energy Working Group			
Title of Project: Survey of Factors Influencing Demand for Minerals and Metals in the APEC Region (Phase 2)			
Proposing APEC Member: Chile			
Co-sponsoring APEC Member(s): Canada, Peru			
Project Overseer: Name, Title and Organization		(M)	
Tomas Astorga, Chair, GEMEED			
Postal address: Teatinos 120, 9 th Fl. Santiago, CHILE		Tel: (562) 6712488 Fax: (562) 6887569 Email: gemeed@minmineria.cl	
Financial Information	Total cost of proposal (US\$): 85,000	Amount being sought from APEC Central Fund (US\$): 42,500	
Type of Project: <input type="checkbox"/> seminar/symposium <input type="checkbox"/> short-term training course <input checked="" type="checkbox"/> survey or analysis and research <input type="checkbox"/> database/website <input type="checkbox"/> others <i>(Please specify)</i>			
Project start date: March 2003		Project end date: May 2004	
Project Purpose: To help industry and governments within the APEC region develop their strategies for investment and production in selected base metals and energy minerals. The Second phase will build outputs on the first Phase results, and update the prospective increases in energy demand arising from likely increases in mineral production. The project will examine factors influencing demand of specific metallic and mineral products which were identified as the most sensitive and influential in demand forecasting, and will deepen analysis of market promotion efforts by industry associations and commodity groups. The specific commodities of the first phase were copper, nickel, zinc, iron and aluminium. The second phase is being extended to other mineral products, metals and industrial minerals. This project focuses on the demand side of the mining business, and addresses a matter of great strategic importance to producers, exporters and consumers of minerals and metals.			
Signature of Project Overseer: <i>(Separate written confirmation acceptable for email submission)</i> Date:			
Signature of Committee Chair/WG Lead Shepherd: <i>(Separate written confirmation acceptable for email submission)</i> Date:			

ECOTECH Weightings Matrix
(Revised - November 2000)

Survey of Factors Influencing Demand for Minerals and Metals in the APEC Region (Phase 2)

Criteria	Supporting Information (<i>paragraph number if details are in the project proposal</i>)	Linkage (1 point for each)
Responds to a <u>specific</u> instruction from Leaders/Ministers ¹	Paragraph 04. Although there is no Specific instruction related to metals/minerals demand forecasting, the project indirectly contributes to the development of mineral and energy resource producing economies through international cooperation, which is one of the collective actions specifically mentioned.	0
Meets a core ECOTECH theme under the <i>Manila Declaration</i> ¹	Paragraph 04	1
Responds to the Common Policy Concepts, Activities and Dialogues identified in Part II of the <i>Osaka Action Agenda</i> ¹	Paragraph 05	1
Responds to a <u>specific</u> ECOTECH Initiative ²	As per the “Action Agenda for the New Economy”, the project contributes to “Create an environment for strengthening of market structures and institutions”.	1
Improves skills, including in new technologies	Paragraph 08	1
Builds capacity and strengthens institutions	Paragraph 06	1
<u>Measurably</u> improves economic efficiency/performance ³	Paragraphs 04 and 05	
Is of <u>practical</u> benefit to the private/business sector; has private/business sector <u>participation</u> ; and/or <u>funding</u> ⁴	Paragraph 07. The project is of practical benefit to the business sector , with its strong participation.	2
Assists economies attain sustainable growth and equitable development, while reducing economic disparities among APEC economies and improving economic and social well-being	Paragraphs 03, 04 and 05. Greater transparency of demand forecasting facilitates the attainment of this criteria.	1
Supports a TILF objective, as laid down in Part I of the <i>Osaka Action Agenda</i> ¹	Paragraph 05	1
Disseminates information including through seminars/websites/databases ⁵	Paragraph 18	0
Outline the <u>outcome</u> and how members will benefit ⁵	Paragraph 06	0
	Net Score	9

Footnote

¹ Identify which instruction/ECOTECH theme/OAA element.

² See <http://www.apecsec.org.sg/ecotech/index.html>

³ Policy outcomes that include development of energy efficiency guidelines, food safety standards etc

⁴ One point for each element up to a maximum of 3 points.

⁵ Not scored

Remarks (Please indicate if not applicable e.g., for TILF projects. Additional information in support of projects which do not score highly may also be provided here by the Lead Shepherd/Chair).

Format for Projects Seeking APEC Funding

This format should be completed with reference to the Guidebook on APEC Projects. It is recommended that the “Guide to Strengthening Project Management and Performance” would be a useful reference. Both Guides are available on the APEC Secretariat website at www.apecsec.org.sg

Please note that items followed by an asterisk () fall within the category of criteria which relate to “APEC values” in the **Criteria of Assessment of APEC projects** set out in Annex B.*

Please provide your answers in point form or as succinctly as possible below each paragraph heading.

A. Project Design

Project

01. Title

Survey of Factors Influencing Demand for Metals and Energy Minerals in the APEC Region (Phase 2)

02. Name of the working group or committee taking responsibility for the project and the dissemination of its results.

Expert Group on Minerals & Energy Exploration & Development (GEMEED/Energy Working Group)

Objectives

03. Describe briefly how you will measure your results (in the short and longer term) to know if your project has been successful. (You must provide detailed assessment measures in paragraph 19)

Mining and associated downstream industries are important to many APEC economies, and APEC’s mining sector produces a high portion of the world’s supply of main minerals and metals. In year 2000, 76% of the world’s copper, 59% of gold, around 60% of bauxite and nickel, and 57% of zinc came from APEC producers. Mining in APEC captures more than 70% of world investment in mineral exploration, development and processing. Producers and consumers have a common interest in the competitive and efficient supply of minerals and metals. An important part of competitiveness is understanding the dynamics of the market, to avoid waste in the allocation of resources and ensure that marketing efforts are focused effectively in the interest of both producer/exporters and consumers.

The first phase of project EWG07/2001T, in its activities to date, has resulted in relevant information on the various factors influencing demand for copper, nickel, and other base metals. They relate mainly to analytical methodologies used by different houses for demand and price outlook forecasts, the complexities of models utilised, the different variables involved, the sources of information, the type of use of forecasts by end users, the most relevant sectors considered in their forecasting, and the accuracy and reliability of the forecasting results. Also it has been possible to identify some existing barriers which will be addressed during the second phase. Besides, the

first phase identified as a most important subject the impact of technological changes in metals demand, which is dynamically influencing the configuration of a new scenario in the mining industry.

During the second phase, the Project aims to deepen the qualitative and quantitative analysis of the various factors influencing demand for base metals and specific products. In particular, this phase aims to identify and determine the impact of technological changes on the minerals demand, including copper, nickel, zinc, iron and aluminium.

In relation to the survey of promotional activities so far, the first phase has resulted in scattered information from institutions dealing with copper demand promotional efforts. This prompted an approach aimed to identify and examine methodologies applied on this area for copper, which will also be included in the second phase, for nickel, zinc, iron and aluminium.

In terms of the relationship between mineral production and energy demand, the second phase of the project will review and update data for copper, and will apply the obtained methodology for other metals, including nickel, zinc, iron and aluminium. Coordination with APERC and the Expert Group on Energy Data and Outlook are envisaged to accomplish this objective.

In the short term, the success indicators will be:

- The realization of market analysis related to technological trends impacting demand for main metals.
- The design of questionnaires and their sending worldwide, in relation to promotional efforts for nickel, zinc, iron and aluminium.
- Analysis of the model fit for copper energy demand.
- Short term feedback on the prospect will also be sought through questionnaire.

In the long term, the success indicators will relate to the industry degree of improvement in transparency and knowledge of market dynamics made possible through the survey. This will imply an ex post analysis and feedback on the project sought through the questionnaire.

04. How, briefly, this project responds to the priorities set by APEC Leaders and Ministers, as evidenced by parts of the APEC Action Agenda including Action Program, work plan, vision statement, and policy statement that relate to this project.

Blake Island – Economic Vision: The project will help ensure a long-term stable supply of mineral and energy resources from responsible mining activities while also promoting economic expansion and prosperity within the region.

Subic Economic Leaders Declaration: By improving market transparency, the project will help member economies improve their efficiency in the production and trading of minerals and metals, foster stability, safety and efficiency of their capital markets, and strengthen their economic infrastructure. Improved demand-side information will also help *safeguard the quality of life by promoting environmentally sound growth*, and encourage the growth of medium and small enterprises in the mineral sector.

Improved market transparency will make possible a better supply - demand balance, and thereby help to reduce the scale of disruptive, economically wasteful and socially damaging price

fluctuations. This will substantially help mineral suppliers to improve the competitiveness of their mining business.

The promotion of sustainable economic growth is one of the fundamental objectives of APEC. This project can help lift the growth of a number of member economies which are heavily dependent now on mineral production and export. It will also encourage the aspirations for future growth of other member economies wishing to increase the contribution of mineral resource development to their economic development.

05. How briefly this project contributes to APEC Trade and Investment Liberalisation and Facilitation (e.g. relevance to specific parts of the Osaka Action Agenda).

The project accords with the emphasis in the Osaka Action Agenda, especially in the following sections of its Part One:

Section A, General Principles. The Project, in its overall context, provides support to the principles of: 1-Comprehensiveness, in relation to address impediments to achieving long term goal of free and open trade; 4- Non- Discrimination, in that supplies information useful to address this issue; 5- Transparency in that it also provides knowledge on agents and factors involved in sectoral demands; 9- Flexibility, in that it provides visions from the perspective of suppliers and consumers, developing and industrialized economies; and 9 - Cooperation, in that the projects outputs will be used in cooperation activities encompassing all member economies at GEMEED, both in the metals and minerals trading as well as in its energy demand implications arising from mining developments.

Section B, Framework for Liberalization and Facilitation. The Project is inserted within this framework, providing inputs to the Action Process (Consultation, Revision, Parallel Activities), and specifically in regard to related minerals and energy demands, in the ongoing collective effort of a confidence - building nature, facilitating exchange of information, and transparency. In turn, these inputs will prove to be useful to the Multilateral Actions and to the Overall Review of the said Framework.

Section C, Actions in Specific Areas. The Project is also linked to the following specific Areas:

1. *Tariffs, and 2. Non-Tariff Measures.* The project provides information useful to the Guidelines of these Areas, especially in those related to the paragraph a) "...intra-APEC trade trends, economic interests, and sectors or products related to industries in which this process may have positive impact on trade and on economic growth in the Asia Pacific Region".

8. *Competition Policy.* The project will provide inputs that will help ensure the transparency of effective and adequate competition policy objectives, "thereby maximizing, inter-alia, the efficient operation of markets, competition among producers and traders, and consumer benefits", in the minerals and energy demand field.

In this way, the project will contribute to increase on transparency and strengthening the open multilateral trading system, maximizing the efficient operation of markets, competition among producers and traders, and benefits for consumers.

It will also promote dialogue with the APEC business community on ways to improve the APEC investment environment. It accords with the objectives of Joint Activities through the compilation

and sharing of data and information, by improving the ability of APEC economies to analyze current and future economic trends and develop and implement policy measures; to use regional resources more effectively; and to increase the effectiveness of policy measures.

The project's examination of the energy demand implications of increasing mineral supply will help foster a common understanding on regional energy issues and facilitate investment in the energy sector.

Linkages

06. The following institutions in member economies will benefit:
- Government agencies responsible for minerals and energy policy, strategic planning and resource economic analysis – through an improved understanding of the forces influencing demand for main minerals and metals (copper, nickel, zinc, iron and aluminium);
 - Exploration, mining and smelting companies – by having more reliable information on which to base decisions to invest for a more stable supply of minerals and metals;
 - Private research institutions – by being able to offer better-informed research and advice to government and industry; and
 - Industry associations and commodity organizations — by being able to compare the effectiveness of strategies now being pursued by each one individually to meet an array of parallel market challenges.
07. How the participation of the business/private sector and non-governmental institutions has been sought or will be sought. Illustrate how the business/private sector has been involved in the planning and delivery of the project and whether any other APEC fora have been consulted. (*).

The **Phase One** of the project has identified numerous agencies around the world currently involved in demand forecasting, most of which have answered the questionnaire sent for the purpose of the completing the first phase. Also, the first phase enabled to identified the range, influence and priority of variables affecting demand, such as consumer tastes and perceptions, technological change and other factors of strategic importance. The analysis of these variables and the responses received from industry and agents have enabled to identify commanding factors which need to be further analyzed in the second phase. New inputs will be sought from the mineral industries and governments of member economies. Companies and public research institutions which have already done work on this theme have been contacted and invited to contribute to the study from the outset.

After the project is completed, the results will be made available to government agencies and institutions of the member economies, and to their mining business sectors.

08. How this project will add “APEC value” (as to the potential benefits of implementing projects) in the context of other work that might have been done elsewhere in the same field. (*)

The project in its first and second phases is bringing together the findings of current work and complementing efforts being undertaken by the International Study Groups on Copper, Nickel,

Lead/Zinc and Bauxite, not duplicating work being done elsewhere. The intention is to add value to industry and help the task of regulators, policy-makers and economic analysts in responding to a range of common strategic challenges facing existing and potential investors in supply of a range of minerals.

The surveys complement the efforts being made by GEMEED through the current ANMED project — the APEC Network of Minerals and Energy Data. As it focuses principally on the metals demand side, it will complement activities currently being undertaken by other Expert Groups, including the Energy Data and Outlook Expert Group and APERC.

09. An indication of how the project might contribute to related projects or activities in APEC or elsewhere.

The data and results from this project will contribute useful perspective to other APEC research projects, especially its component on updating the information obtained in the first phase on increases in energy demand arising from minerals development.

10. Describe the deliverables of the project and demonstrate how they will meet the needs of the targeted beneficiaries.

In Phase 1, the survey of base metals demand forecasting involved the development of quantitative information and software on copper, nickel, iron, zinc and bauxite/aluminium, and on energy requirements.

Phase 2 will extend this examination to a second priority list of minerals and metals, including industrial minerals and certain type of by-products with high-tech applications.

Methodology

11. A concise description of the project's methodology by components, with its associated outputs clearly specified.

This project consists of two phases. Phase 1 will cover:

1. A survey of demand forecasting around the world presently conducted by government agencies, private firms and international study groups.
2. A survey of measures being taken or considered by industry and international study groups designed to promote demand for individual commodities, and an assessment of the effectiveness of these measures.
3. An assessment of the energy demand implications arising from projected mining developments, expansions and contractions.

Phase 2 will cover:

1. Deepen the survey through the analysis of the impact of technological trends in demand of main metals and minerals. The technological variables and their dynamic are factors that will be identified and dimensioned.
2. Identify the most influential products impacting the development of demand on base metals.

3. Effectiveness assessment of promotional efforts for nickel, zinc, aluminum and iron.
4. Review and update of energy demand implications for copper
5. Application of obtained survey methodology to energy demand for nickel, zinc, aluminum and iron.
6. Reports submission and dissemination of survey results.

During the phases, GEMEED meetings would discuss the proper application and use of the survey, the collection of data and forecasting systems.

12. A timeline for circulation and submission of this project proposal with drafts circulated well in advance to fora to allow careful consideration.

March-April 2002. Document posting in GEMEED web page, circulation to GEMEED members, and to the EWG. Considered by Members at EWG23.

13. A timetable for the accomplishment of each component in (11).

The schedule for the implementation of Phase 2 is as follows:

- (May 2003 – June 2003). Data gathering, identification and contacting of agents, and retrieving basic information

Steps 1 and 2

- (June 2003 - October 2003). Survey on technological trend impact

Step 3

- (September 2003 - December 2003). Survey on promotional efforts

Steps 4 and 5

- (January 2004 – April 2004). Energy demand.

Step 6

- (October 2003). Presentation of progress report at GEMEED Meeting
- (May 2004). Submission of report and digital documentation
- (May 2004). Completion of Phase 2 of the Project

14. The number of APEC member economies that will participate in this project. Please indicate the names of member economies participating in each component of the project as set out in (11). (*)

All APEC member economies are invited and encouraged to participate in this project, especially those having strong mining or metal-consuming sectors: Australia, Canada, Chile, China, Indonesia, Japan, Korea, Malaysia, Mexico, Papua New Guinea, Peru, Philippines, Chinese Taipei, Thailand, Russia, United States, Vietnam.

Budget

15. Itemized budget for the project.

The amount of APEC TILF funding sought in year 2003 -2004 is US\$ 42 500. In addition, self-funding will be provided by Chile to the extent of \$US 42.500. Details are set out in the attached sheet entitled “*Annex 2 — APEC TILF SPECIAL ACCOUNT : ITEMIZED BUDGET FOR FINANCIAL YEAR*”.

16. Timetable for the drawdown of APEC funding.

A timetable for the drawdown of APEC funds will be developed according to the APEC financial rules, and submitted to the APEC Secretariat before the commencement of the project.

17. Details of any request for waiver or exception from the normal APEC financial rules.

No such request is envisaged

Dissemination of Project Output

18. Plan for the publication and dissemination of the results of the project, including:

Plans are as follows:

- a. The target audience includes policy makers of APEC member economies, public research institutions, private economic forecasters, universities and mining companies.
- b. The results will be written up as a summary of the achievements of the project.
- c. The summary will be made into computer software, as well as being distributed in hard copies.
- d. 300 copies will be made of the software and summary.
- e. 10 copies of the software and summary will be distributed to each member economy, 10 to each participating organization, and 5 to each of the major mining companies in the member economies.
- f. The final report of the research study will be published on the internet through the home pages of the GEMEED Secretariat, and ANMED (the APEC Network of Minerals and Energy Databases). Publicity for the study will be achieved by:
 - Briefing the general and specialist media about the purposes and key components of the project and writing a media release upon completion of report. Articles will also be published in specialist journals such as the Engineering and Mining Journal, Mining Magazine, the CIM Bulletin, the Australian Journal of Mining and Asian Journal of Mining; and
 - Making copies of the final product available for sale, and advertising them through the home pages of ANMED, GEMEED, the EWG and any other pertinent websites.
- g. Copies of the publication and software will be sent to the EWG and GEMEED representatives in member economies. Additional copies will be available from the GEMEED Secretariat.
- h. Costs of publication and dissemination are allowed for in the itemized budget.

Assessment of Project

19. With reference to your objectives stated in paragraph 3, provide detailed criteria (quantitative and qualitative) for how you will measure your results in the short and long term to know if your project has been successful. State your current benchmarks for measurement, your target results from the project for each measurement criterion and the range of acceptable results both in numerical and percentage terms, where possible.

The project will be made mainly of survey questionnaires, analysis of replies, extrapolation of the answers into groups, identification of factors influencing demand, and forecasts.

About measure of results:

- The realization of market analysis of three industrialized and one emerging economy in respect to technological trends impacting demand for main metals.
- Sending a questionnaire worldwide, in relation to promotional efforts for nickel, zinc, iron and aluminium. To receive forty answers will be considered a good result to make analysis.
- In relation to copper energy demand model, a measure will be the analysis of the fit of results.

In the long term, the success indicators will relate to industry degree of improvement in transparency and knowledge of market dynamics made possible through the survey. This will imply an ex post analysis and feedback on the project sought through the questionnaire.

Gender Criteria for Formulation and Evaluation of Projects

Objectives

1. Show how the objectives of the project provide benefits for women, where appropriate. APEC Ministers have indicated (*Framework for the Integration of Women in APEC*) that benefits might include: increased involvement of women; taking account of the differences in women's and men's lives (gender analysis); and collection/use of sex-disaggregated data.

Although the project does not consider specific aspects related to gender, applying the results will be useful for the specific projects in which these matters are considered.

Linkages

2. Show how the participation of women has been/will be sought. Show how women are involved in the planning, management, allocation of resources, and implementation of the project.

Women are at present participating in the survey project according to the policies of the Government of Chile and the sponsoring member economies. One of the clauses related to contractor selection will be the number and qualifications of professional women in the survey procedure.

Methodology

3. Provide a brief description of the way women will be able to participate equitably in the development and implementation of the project.

Women will be able to participate in any stage of the project either in its planning, management or implementation.

4. Provide a brief description to show that the project will collect and use sex-disaggregated data (if available) to measure the project's effects on women.

Sex-disaggregated data related to project objectives are not available.

Dissemination of project output

5. Does the plan for the publication and dissemination of the project's results include communication methods that are appropriate for women? Questions that may be relevant include: Are women one of the target audiences? Does the plan take account of women with low literacy and women with low access to electronic media? Will the results be disseminated to women's organizations?

Although the target audience does not consider specific women organizations, the results might be useful for them.

Budget

6. Are women involved in making decisions on the allocation of resources?

Yes, women are involved in making decisions on the allocation of resources

7. Where appropriate, provide details of the project's budget that are allocated to activities that address the specific needs of women.

It is not appropriate.

Assessment of project

8. Provide details of how the project proponent will assess whether he/she has met the gender criteria for APEC projects and how he/she will measure the impact of the project on women.
 - a) Number of women participating in the project are two (25%).
 - b) Although the project does not consider specific aspects related to gender, applying the results will be useful.

APEC TILF Special Account
Itemized Budget for Financial Year 2003*

(Please tick ✓)

This project is:

- a seminar, symposium or short-term training course
 a survey or analysis and research project
 neither the above but involves the provision of equipment

Items			APEC Funding (USD)	Self Financing (USD)
<i>Direct Labour</i>	No. of Hours	Rate		
- Speaker's Honorarium	600	50		30 000
- Translator's Fees	-	-	-	-
- Short-term clerical and secretarial staff remuneration	210	20		4 200
- Consultant (including Researcher) Fees	500	75	37 500	
- Consultant's Secretary Cost	300	20		6 000
<i>Travel</i>				
- Per Diem (incl. Accommodation and "additional payment")	10 days	250	2 500	
- Airfare	1 trip		2 500	
	No. of Copies	Unit cost		
<i>Publication of report</i> (including distribution)	100	10		1 000
<i>Equipment / Materials</i> (pl. describe briefly what is required and why)				
<i>Photocopying</i>				300
<i>Communications</i> (Phone/ Fax/ Mail/ Courier)				1 000
<i>Hosting</i> (pls describe, eg, conference room rental, stationery)				
<i>Total</i>			42 500	42 500