

Power Chips plc 2004 Annual Report



Fellow Members:

In fiscal 2004 our Company made major progress toward completing production prototype Power ChipsTM on the back of our Cool ChipsTM work. We do not have production prototype Cool Chips yet, but we are close. Unless we get additional separate funding for Power Chips plc, we will make production prototype Cool Chips before making production prototype Power Chips.

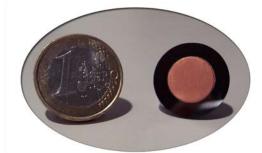
For the first several years our sales of Power Chips will be to the high-value military markets where there is great need for a truly portable, simple, efficient electric power generation source that can utilize existing infrastructure. Only after these markets are satisfied will we move to satisfy the more general power production markets.

Power Chips plc was formed in 1997, as a member of the Borealis Family of Companies, to develop and market the Power Chip, a solid-state device capable of generating electrical power when energetic electrons move across a nanometer-scale gap between two diodes. Because of the inherently high efficiency of this effect, Power Chips offer a unique primary power generation solution and a beneficial means of enhancing the efficiency of all existing power generation systems that rely on heat energy to produce electrical power.

Power Chips are small, lightweight, durable, versatile, silent, nonpolluting, and operate without any

moving parts. They will make it possible to generate electricity anywhere there is a source of heat. Major potential applications include power generation in electric or hybrid-electric vehicles, reclaiming and converting waste heat in conventional power plants, and stand-alone power generation systems for individual buildings, thus avoiding all the problems of infrastructure cost and potential brownouts associated with area grid-based power systems.

For these and many other applications we expect Power Chips to be superior not only to all established technologies,



Prototype Chip shown with a

Chips to be superior not only to all established technologies, but also to emerging technologies such as fuel cells. The worldwide market for electric power exceeds \$1 trillion a year, and we expect that Power Chips will over the next few decades replace most existing means for generating electricity and capture most of this market, while also creating new markets by making electricity almost universally available everywhere over time as well as less expensive.

We anticipate that over the next few decades Power Chips will revolutionize electrical power generation across virtually all applications. In existing power stations, adding Power Chips to capture heat that is now wasted will enable these generating stations to produce at least 20% more power with no increase in fuel consumption or emissions. In automobiles and other vehicles, Power Chips initially are likely initially to replace the starter-alternator, using waste heat from the radiator and exhaust and greatly increasing the efficiency of the internal combustion engine. Eventually, all-electric vehicles will become feasible, with power generated by Power Chips—burning gasoline, natural gas, methane or hydrogen as fuel to produce heat—and driving a super-efficient Chorus

motor (developed by our sister company, Chorus Motors plc). Such an automobile would achieve several times the fuel efficiency of current models and produce only a fraction of the emissions.

Power Chips will also make it possible to efficiently generate power in a wide range of portable devices, thus increasing their utility. They will make it possible to bring plentiful electric power to regions of the world whose peoples and economies now suffer from inadequate electric power, at a fraction of the cost of doing so using current generating technologies.

We have been working on our proprietary, patented thermotunneling technology since 1997. There is a widespread belief that fuel cells, which generate power through a chemical reaction of oxygen and hydrogen, will be the next major power-generation technology. But despite decades and billions of dollars spent on research and development efforts, fuel cells remain relatively inefficient, uneconomic, and environmentally dangerous.

Power Chips, which rely simply on a flow of electrons rather than steam turning a turbine, as in conventional power plants, or a chemical reaction, as in fuel cells, will produce electricity at a high efficiency. While conventional technologies generate power at 40-45% of the maximum theoretical (Carnot) efficiency for a heat pump, Power Chips are projected to operate at 70-80% of Carnot efficiency. And the cost of producing power with Power Chips will be far less than the capital and operating costs of conventional generation methods.

Much more information about our Company and our technology, including our complete current business plan including financial projections, full texts of issued patents, and extensive descriptions of our Power Chips technology, is available on our Website at www.powerchips.gi.

Organization and Operations

Power Chips plc is a member of the Borealis Family of Companies and is a publicly traded indirectly majority-owned subsidiary of Borealis Exploration Limited. Borealis Technical Limited, our direct parent company, owns 5,215,722 of our 8,021,265 outstanding shares, or 65% of our shares. Like our parent and most family companies, Power Chips plc is incorporated in Gibraltar.

While our headquarters and legal domicile are in Gibraltar, Power Chips operates as a virtual company, and the Internet plays a dominant role in our day-to-day work. It is the means by which we manage our businesses, discuss new ideas, and promote ourselves to the outside world. Modern communications technology has allowed us to circumvent the traditional problems associated with working on four continents and twenty time zones. Because of this, we have access to facilities and personnel about which a company of our size would normally only be able to dream.

Power Chips has consultants around the world, all of whom work over e-mail. Management and technical discussions take place over the Internet. We have a continual Board of Directors meeting 24 x 365, with an annual traffic of over 2,500 messages to each board member. Power Chips has intense direct participatory management, and many consultants to the Company sit in on the board meetings and provide input even though they are not voting members.

Our Website, www.powerchips.gi, makes information about our technology available, and informs shareholders, other companies, and the general public about Power Chips. As patent offices issue

more patents, a more complete picture of our extensive research efforts will become publicly available on the Website. Additionally, our parent company, Borealis, sends out a weekly update (as well as daily share trades with Borealis' prices) to shareholders and to all the major news organizations and other interested parties, detailing our ongoing work and progress (please e-mail pr@powerchips.gi if you would like to receive these updates). Through this wide distribution, we are able to keep people better informed than through traditional channels. Your management uses this technology to maintain a close relationship with our shareholders.

This virtual company structure is great to work with and allows us to have many people directly involved in the decision-making processes at Power Chips. This approach may not be conventional, but the results to date have validated the business structure.

Patents and Intellectual Property

All patents relating to the Power Chips technology are held by our parent, Borealis Technical Limited, which has granted Power Chips plc an exclusive, perpetual, worldwide license to them for all power generation applications. Borealis Technical Limited so far has been granted more than 20 U.S. and international patents for its scientific and technological advances in thermotunneling and power generation.

We expect the courts over time to give much of our patent work "pioneer" patent status, reflecting the fact that they are the first patents to be issued in an entirely new field of technology, or represent a technical revolution in a previously-defined field. Pioneer patents are those to which most later patents in a field make reference, or on which later patents build by adding new improvements to the field. Because pioneer patents represent the result of groundbreaking scientific discoveries or development, the courts have found that they merit a wide breadth of protection in construing their claims and specifications.

In fiscal 2004 Borealis Technical was granted two new U.S. patents for improvements related to our Power Chips technology. It also filed applications for additional power-related patents, and now has a considerable number of applied-for, in-process, and pending patent applications.

Because our scientific discoveries and technical advances are the core of our business, we are very careful about protecting these assets. Patenting and otherwise protecting our technologies is an important activity at Power Chips and consumes a considerable portion of our resources. We have developed an extensive library of intellectual property and we intend to protect it vigorously.

Financial Report

Management's Discussion and Analysis of 2004 Results

Our loss for fiscal 2004 was \$43,200 which is the amount of our management fee to our parent company. The cumulative loss to date is \$306,000 as compared to fiscal 2003 of \$262,800.

Your company has no liabilities and a receivable from its parent company which at the end of our fiscal year 2004 totaled \$ 5,049,016 compared to \$4,302,365 for last year.

All proceeds from private share sales by Power Chips plc are lent to Borealis Technical Limited, and in return Borealis Technical Limited pays all the bills of Power chips plc, while Power Chips plc owes Borealis Technical Limited 8% of all royalty revenue, and 50% of all sublicensing revenue.

Your Company is financially very strong. Having the parent company assume all liabilities creates the strength.

At fiscal year end 2004 we had 8,021,265 shares outstanding as compared to 7,751,589 shares outstanding for fiscal year-end 2003.

Please note that the total number of shares outstanding is limited to 10 million shares. We expect to be fully funded and cash flow positive with less than the 10 million authorized shares actually issued.

We are pleased about the future of Power Chips plc. The future looks incredibly bright.

Our patent position and scientific advances continue apace.

We thank our members for their help and assistance as we drive this wonderful technology to hopefully the domination of the world's electric power generation.

Power Chips plc

Rodney T. Cox Chairman and CEO

Isaiah W. Cox President and COO

Forward Looking Statement

The discussion of the Company's business and operations in this report includes in several instances forwardlooking statements, which are based upon management's good faith assumptions relating to the financial, market, operating and other relevant environments that will exist and affect the Company's business and operations in the future. All technical, scientific, and commercial statements regarding technologies and their impacts are based on the educated judgment of the Company's technical and scientific staff. No assurance can be made that the assumptions upon which management based its forward-looking statements will prove to be correct, or that the Company's business and operations will not be affected in any substantial manner by other factors not currently foreseeable by management or beyond the Company's control.

All forward-looking statements involve risks and uncertainty. The Company undertakes no obligation to publicly release the result of any revisions to these forward-looking statements that might be made to reflect the events or circumstances after the date hereof, or to reflect the occurrence of unanticipated events; including those described in this report, and such statements shall be deemed in the future to be modified in their entirety by the Company's public pronouncements, including those contained in all future reports and other documents filed by the Company with the relevant Securities Commissions.



PUBLIC LIMITED COMPANY

Registered No (Gibraltar) 60528

Financial Statements

for the year ended 31 March 2004

POWER CHIPS PUBLIC LIMITED COMPANY Registered No (Gibraltar) 60528

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POWER CHIPS PUBLIC LIMITED COMPANY Registered No (Gibraltar) 60528

DIRECTORS AND OFFICERS

Directors	Appointed	
Rodney T. Cox	23 Mar 2000	Director, Chairman of the Board, and Chief Executive Officer
Isaiah W. Cox	23 Mar 2000	Director, President, and Chief Operating Officer
Wayne S. Marshall	23 Mar 2000	Director
Peter Vanderwicken	06 Sept 2000	Director
Iris Oren Cox	24 July 2001	Director
Nechama J. Cox	01 Aug 2001	Director
Stuart Harbron	23 July 2002	Director, and Chief Patent Officer
Giulio Pontecorvo	28 Aug 2003	Director
Robert T. Bauer	17 May 2004	Director
Joseph J. Cox	(resigned 27 Ju	ne 2003)

Secretary

Fidecs Management Limited (Formerly known as BDO Fidecs Management Limited)

Registered Office

Montagu Pavillion 8-10 Queensway Gibraltar

Auditors

Moore Stephens Suite 5 Watergardens 4 Waterport Gibraltar

DIRECTORS' REPORT

The directors submit their report and the audited financial statements for the year ended 31 March 2004.

Corporate Profile

The Company was incorporated on 11 February 1997 in Gibraltar. The Company trades as PWCHF on the OTC market in the United States. The last trade was at \$5.00 per share with the yearly high being \$12.50 per share and the low being \$3.00 per share.

Activities

The principal activity of the Company is that of researching, developing and marketing the "Power Chips" technology, which uses quantum tunnelling to produce electricity.

Results and Review of Business

The results for the year are shown in the profit and loss account on page 5.

Borealis Technical Limited ("Technical"), the parent company, has conducted basic industrial research on its "Power Chips" technology since 1996 for which it has patents issued and pending. All of the research expenditures to date have been undertaken by Technical and funded by Borealis Exploration Limited, the ultimate parent of the Company, and by the sale of Company shares with the proceeds being loaned to Technical. The funds received from all shares sakes are due back to Power Chips plc. Power Chips plc has no financial obligations, and this will not change until the Company is cash flow positive and profitable.

An Intellectual Property Agreement was signed effective 1 January 1999, whereby Technical has granted the Company the exclusive worldwide rights for sublicensing the "Power Chips" technology. In consideration for the rights granted to the Company, the Company shall pay Technical an 8% royalty based on net sales of licensed products and services sold by the Company and 50% of all sublicense income. To date the "Power Chips" technology is still under development such that the Company has not made any related sublicense sales.

The Company has been in the development stage since its inception. The Company intends to retain its sublicense rights granted by Technical. These financial statements have been prepared in accordance with generally accepted accounting principles with the assumption that the Company will be able to realize its assets and discharge its liabilities in the normal course of business rather than through a process of forced liquidation. From inception to 31 March 2004, the Company has lent money raised on its behalf to Technical and Borealis Exploration Limited, who are also in a development stage. The present circumstances therefore raise certain doubts about the ability of the Company to continue as a going concern. Management of the Company has indicated they have no intention to demand repayment of the amounts owing from Technical until "Power ChipsTM" are being sold into the market and or licensing has commenced and the Company is both cash flow positive and has earnings. The Company and Technical are actively working together to negotiate product sales or further sublicensing of its technology to various parties, which activities are expected to generate profitable operations in the future. To the extent additional funds are required, the Company will attempt to raise these funds through future sales of product, license sales and further share issues. There can be no assurance that the Company will be successful in its actions. The financial statements do not contain any adjustments that might be necessary if the Company is unable to continue as a going concern.

Registered No (Gibraltar) 60528

DIRECTORS' REPORT (Continued)

Dividends

There were no dividends declared during the year.

Directors and their Interests

The directors who served during the year were as stated on page 1.

The interest of the directors in the shares of the Company at the year end were as follows:

	Shares held at 31 March 2004
Rodney T. Cox	114,280
Isaiah W. Cox	25,750
Wayne S. Marshall	80,764
Peter Vanderwicken	8,399
Iris Oren Cox	5,600
Nechama J. Cox	20,275
Stuart Harbron	14,500
Giulio Pontecorvo	5,000
Robert T. Bauer	4,000

Share Options

As of 31 March 2004, there were no share options outstanding.

Directors' Responsibilities

The directors are responsible for preparing financial statements for each financial year which give a true and fair view of the state of affairs of the Company at the end of the financial year and of the profit or loss for that year and which comply with the Gibraltar Companies Ordinance 1930 and the Gibraltar Companies (Accounts) Ordinance 1999. In preparing the financial statements, appropriate accounting policies have been used and applied consistently, reasonable and prudent judgements and estimates have been made, and applicable accounting standards have been followed. The directors are responsible for maintaining adequate accounting records, for safeguarding the assets of the Company, and for preventing and detecting fraud and other irregularities.

Auditor

A resolution to reappoint Moore Stephens will be proposed at the Annual General Meeting.

By order of the Board on 12 August 2004

Isaiah W Cox Director

Rodney T Cox Director

Registered No (Gibraltar) 60528

REPORT OF THE AUDITORS

To the members of Power Chips Public Limited Company

We have audited the financial statements on pages 5 to 9, which have been prepared under the historical cost convention and the accounting policies set out on page 7.

This report is made solely to the Company's members as a body, in accordance with the Companies Ordinance 1930. Our audit work has been undertaken so that we might state to the Company's members those matters we are required to state to them in an auditor's report and for no other purpose. To the fullest extent permitted by law, we do not accept or assume responsibility to anyone other than the Company and the Company's members as a body, for our audit work, for this report, or for the opinions we have formed.

Respective responsibilities of directors and auditors

As described in the report of the Directors, the Company's Directors and management are responsible for the preparation of financial statements. It is our responsibility to form an independent opinion, based on our audit, on those statements and to report our opinion to you.

Basis of opinion

We conducted our audit in accordance with Auditing Standards issued by the Auditing Practices Board in the United Kingdom. An audit includes examination, on a test basis, of evidence relevant to the amounts and disclosures in the financial statements. It also includes an assessment of the significant estimates and judgements made by the directors in the preparation of the financial statements and of whether the accounting policies are appropriate to the Company's circumstances, consistently applied and adequately disclosed.

We planned and performed our audit so as to obtain all the information and explanations which we considered necessary in order to provide us with sufficient evidence to give reasonable assurance that the financial statements are free from material misstatement, whether caused by fraud or other irregularity or error. In forming our opinion we also evaluated the overall adequacy of the presentation of information in the financial statements.

In forming our opinion, we have considered the disclosures made in note 1 of the financial statements in connection with the application of the going concern basis and the uncertainty with regards to securing continued financial support. In view of the significance of these matters we consider they should be drawn to your attention but our opinion is not qualified in these respects.

Opinion

In our opinion the financial statements give a true and fair view of the state of affairs of the Company as at 31 March 2004, and of the loss for the year then ended in accordance with Gibraltar Accounting Standards and have been properly prepared in accordance with Gibraltar Companies Ordinance 1930, and the Gibraltar Companies (Accounts) Ordinance 1999.

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Moore Stephens CHARTERED ACCOUNTANTS

Gibraltar 12 August 2004

PROFIT AND LOSS ACCOUNT for the year ended 31 March 2004

Expenditure	Notes	2004 \$	2003 \$
Administration fees	5	(43,200)	(43,200)
Retained loss for the year		(43,200)	(43,200)
Retained losses brought forward		(262,800)	(219,600)
Retained losses carried forward		\$ (306,000)	\$ (262,800)

The Company has had no discontinued activities during the year, accordingly, the above result for the Company relates solely to continuing activities.

No statement of recognised gains and losses has been produced as the only recognised gains and losses occurring in the year are those disclosed in the Profit and Loss Account.

The notes on pages 7 to 9 form part of these Financial Statements.

BALANCE SHEET as at 31 March 2004

	Notes	2004 \$	2003 \$
Current Assets			·
Debtors	2	5,049,016	4,302,365
Total Net Assets		\$ 5,049,016	\$ 4,302,365
Capital and Reserves			
Called up Share Capital Share Premium Account Profit and Loss account	3,4 3,4 4	123,485 5,231,531 (306,000)	120,788 4,444,377 (262,800)
Total Shareholders' Funds		\$ 5,049,016	\$ 4,302,365

Signed on behalf of the Board of Directors on 12 August 2004

Isaiah W Cox Director

Rodney T Cox Director

The notes on pages 7 to 9 form part of these Financial Statements.

NOTES TO THE FINANCIAL STATEMENTS for the year ended 31 March 2004

1. PRINCIPAL ACCOUNTING POLICIES

The financial statements have been prepared in accordance with Gibraltar Accounting Standards and the Gibraltar Companies Ordinance 1930 and the Gibraltar (Companies Accounts) Ordinance 1999 (together, 'Gibraltar GAAP').

a. Basis of accounting

The financial statements are prepared in accordance with the historical cost convention.

b. Reporting currency

The Company's financial statements are presented in US dollars, which is the functional currency for operations.

c. Foreign currency translation

Transactions in foreign currency are recorded at the rate at the date of the transaction. Any monetary assets or liabilities denominated in foreign currencies are retranslated at the rate of exchange ruling at the balance sheet date.

d. Going Concern

These financial statements have been prepared under the going concern concept, which assumes that the Company will continue in operational existence for the foreseeable future having adequate funds to meet their obligations as they fall due. Further information is set out in the Directors' Report on pages 2 to 3.

e. Cash Flow Statements

The Company meets the size criteria for a small company set by the Companies Act 1985, and therefore, in accordance with FRS1: Cash Flow Statements, it has not prepared a cash flow statement.

f. Taxation

The Company has been granted exempt status under the Gibraltar Companies (Taxation and Concessions) Ordinance. Providing the Company continues to satisfy the criteria for such status, including the payment of an annual government charge of £225 it will not be subject to Gibraltar Corporation Tax for a period of twenty-five years from 24 August 1999, the date on which it was granted such status. There is proposed legislation now pending approval that may change the tax status of the Company in the foreseeable future, although it appears likely that a low or zero rate of taxation will apply under the proposed new structure

NOTES TO THE FINANCIAL STATEMENTS for the year ended 31 March 2004

2. **DEBTORS**

	2004 \$	2003 \$
Loan to related party	\$ 5,049,016	\$ 4,302,365

Amounts due from the Company's parent company are non-interest bearing, unsecured, and with no fixed terms of repayment

3. CALLED UP SHARE CAPITAL

Authorised share capital			2004 \$	2003 \$
10,000,000 ordinary shares @ £0.01 each			\$160,000	\$ 160,000
	Number of Shares	Share Capital \$	Share Premium Account \$	Total \$
At 31 March 2002	7,348,487	116,745	2,243,594	2,360,339
Shares issued during the year	403,102	4,043	2,200,782	2,204,825
At 31 March 2003	7,751,589	120,788	4,444,377	4,565,165
Shares issued during the year	269,667	2,697	787,154	789,851
At 31 March 2004	8,021,256	\$ 123,485	\$ 5,231,531	\$ 5,355,016

The shares issued were partly to raise additional finance (cash received in Technical) and partly to settle amounts owing to creditors by Technical.

NOTES TO THE FINANCIAL STATEMENTS for the year ended 31 March 2004

4. **RECONCILIATION OF MOVEMENTS IN SHAREHOLDERS FUNDS**

	Share Capital \$	Share Premium Account \$	Profit & Loss Account §	Total \$
At 31 March 2002	116,745	2,243,594	(219,600)	2,140,739
Shares issued during the year Loss for the year	4,043	2,200,782	(43,200)	2,204,825 (43,200)
At 31 March 2003	120,788	4,444,377	(262,800)	4,302,365
Shares issued during the year Loss for the year	2,697	787,154	(43,200)	789,851 (43,200)
At 31 March 2004	\$ 123,485	\$ 5,231,531	\$ (306,000)	\$ 5,049,016

5. RELATED PARTY TRANSACTIONS

In addition to related party transactions disclosed elsewhere in these financial statements, during the year ended 31 March 2004, the Company was charged \$43,200 (2003 - \$43,200) in fees for administrative services provided by Technical.

6. ULTIMATE PARENT COMPANY

The ultimate parent company is Borealis Exploration Limited, a company incorporated in Gibraltar whose registered office is at Montagu Pavillion, 8-10 Queensway, Gibraltar.

7. POST BALANCE SHEET EVENTS

Since the year end the Company has given a commitment to issue up to 20,000 shares to third parties at a price of \$5 per share, contingent upon the outcome of certain events being determined by 2 August 2005.