

CONNECT

Alberta's Action Plan:
Bringing Technology to Market

Alberta
Canada 

Message from the Premier

Resourceful people. Original ideas. Adventurous entrepreneurs. Innovative companies. A thriving technology sector. A committed government. We're all coming together to create Alberta's Next Generation Economy.

Alberta's success in the Next Generation Economy is so important to my government that I made it a top priority in the mandate for Advanced Education and Technology Minister Doug Horner.

Part of that mandate meant finding even better ways to commercialize the great ideas coming out of Alberta and to bring them to the market faster. Working with industry, Alberta has come up with an action plan to make a good formula even better. We've already got a good start, and I look forward to seeing this plan continue to develop over the next few years.

Alberta equals opportunity. We celebrate ideas here. We nurture them, commercialize them and export them to the world.

Yours sincerely,

Original signed by
Ed Stelmach
Premier of Alberta





Alberta Advanced Education and Technology Minister Doug Horner (left) and Premier Ed Stelmach observe technologies at Alberta's National Institute for Nanotechnology.



Capturing the Momentum...

■ *Our success in applying science, research and technology to develop innovations has put us at the forefront of many industries...health care, energy and energy efficiency, forestry, ICT, environment, nanotechnology and agriculture.*

Now we're building on that success. Our Action Plan will assist Alberta entrepreneurs in getting more of their ideas off the research bench and into consumers' hands.



Alberta's **Action Plan** for Bringing Technology to Market

Enhancing an already strong tax environment

action 1: Implement a science and research experimental development tax credit

Inviting the world to invest

action 2: Establish a \$100 million Alberta Enterprise Corporation to attract and strengthen venture capital investments in Alberta

Building your company and products

action 3: Strengthen access to regional business services to improve your company's investment-readiness

action 4: Introduce new technology development advisors

action 5: Offer innovation vouchers to assist companies in accessing technology development services

action 6: Prepare products for market through enhanced product development centres

action 7: Create a demonstration fund for testing new products

action 8: Expand the IVAC Capacity Builder Program for pre-commercial and seed stage technology companies

Encouraging new technopreneurs

action 9: Support Youth Technopreneurship project initiatives

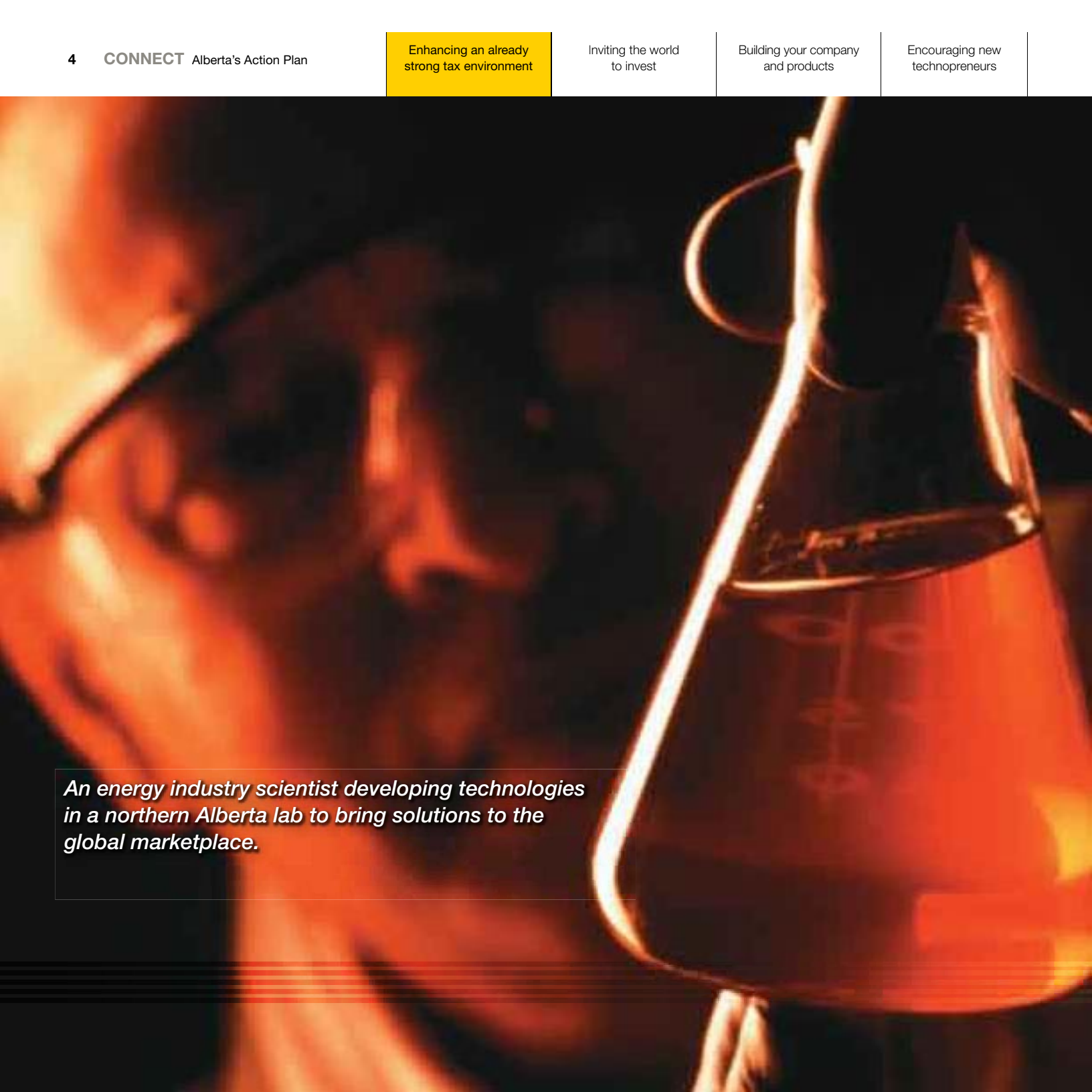
Alberta's Action Plan is different. What's different about our plan is that we're pursuing a wide range of coordinated initiatives. It's a package that's good for Alberta businesses and good for investors.

Never before has the momentum been greater.

With more and more companies discovering what Alberta has to offer, we are building a community of researchers, mentors, investors and businesspeople who are gaining momentum.

It's happening. Be part of the future happening now in Alberta.





An energy industry scientist developing technologies in a northern Alberta lab to bring solutions to the global marketplace.

Action 1:

Implement a science and research experimental development tax credit

■ *Implement a science and research experimental development (SR&ED) tax credit to boost investment in R&D in Alberta.*

Alberta has long been known for the lowest taxes in Canada and a supportive business environment that encourages entrepreneurship.

A new SR&ED tax credit is a further step to remain competitive with other jurisdictions to attract, retain and grow knowledge-intensive companies.

The credit will be effective for all eligible expenditures incurred after December 31, 2008, that are also eligible for the federal SR&ED credit. Examples of eligible expenditures could include wages, materials, machinery, equipment, some overhead and SR&ED contracts.

The credit will be worth 10 per cent of a company's eligible expenditures up to \$4 million, for a maximum credit of \$400,000. It will be refundable for all companies.



Action 2: **Establish** \$100 million Alberta Enterprise Corporation

■ *Establish \$100 million Alberta Enterprise Corporation to attract and strengthen venture capital investments in Alberta.*

The Alberta Enterprise Corporation will be a cornerstone to our Action Plan for Alberta.

Its expert board will invest as a limited partner in a range of venture funds, not just one fund. Those funds will invest in promising companies, generate multiple

sources of funds, and attract more venture capital to Alberta to invest in early-stage technology companies.

This locally managed entity will also assist in building a community of venture capital professionals experienced in technology deals. It will encourage active investors that can mentor and guide companies, expand their networks and open doors to new markets.





An Alberta company specializing in high-tech health solutions.

A man with glasses and a blue shirt is smiling while holding a black GPS device. In the background, a large screen displays a complex data visualization with various colored bars and charts, suggesting a high-tech or data-driven environment.

An Alberta company using real-time data and GPS to find transportation solutions.

Action 3:

Strengthen access to regional business development services

■ *Strengthen access to regional business services to improve your company's investment-readiness.*

A technology company can flourish anywhere in Alberta. When it comes to regional business development, Alberta's success is province-wide.

We're fortunate to have individuals, agencies, programs and networks that support new start-ups and growth-oriented companies. They can help make your company investment-ready by offering a range of information services, business advice, networking forums and promotional activities. In some cases, they even provide office space and related facilities.

We will focus on customer-centred approaches that cater to technology-specific businesses. Business Development Centres can involve real organizations and virtual networks of service delivery, depending on the particular setting and nature of local industry. The centres will provide tangible business advice to those who need it or re-direct inquiries to those who can.

Through these important centres, we can ensure that services supporting innovative entrepreneurs are available locally in Alberta, assisting all regions as they diversify their economies and adapt to knowledge-based and value-added sectors.



Action 4: Introduce new technology development advisors

■ *Introduce new technology development advisors (TDAs) to provide one-on-one advice and information to companies and projects across the province.*

These industry technical experts will bring an important knowledge of relevant technology and familiarity with current product development issues. They will provide key business contacts, can assist with sourcing inputs and will have first-hand experience in what makes good products work.

TDAs will assist young companies as they overcome information and development hurdles, ultimately saving valuable time, money and energy that entrepreneurs can put to better, more productive uses.

Our TDAs will work closely with companies on:

Technology – Validation, development and scale-up, demonstration and deployment.

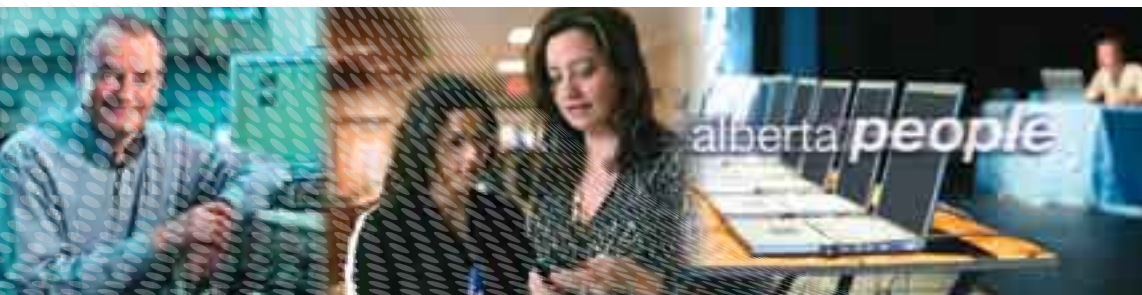
Business – Initial guidance on intellectual property issues, strategy and management, competitive intelligence, market foresight, marketing and distribution strategy.

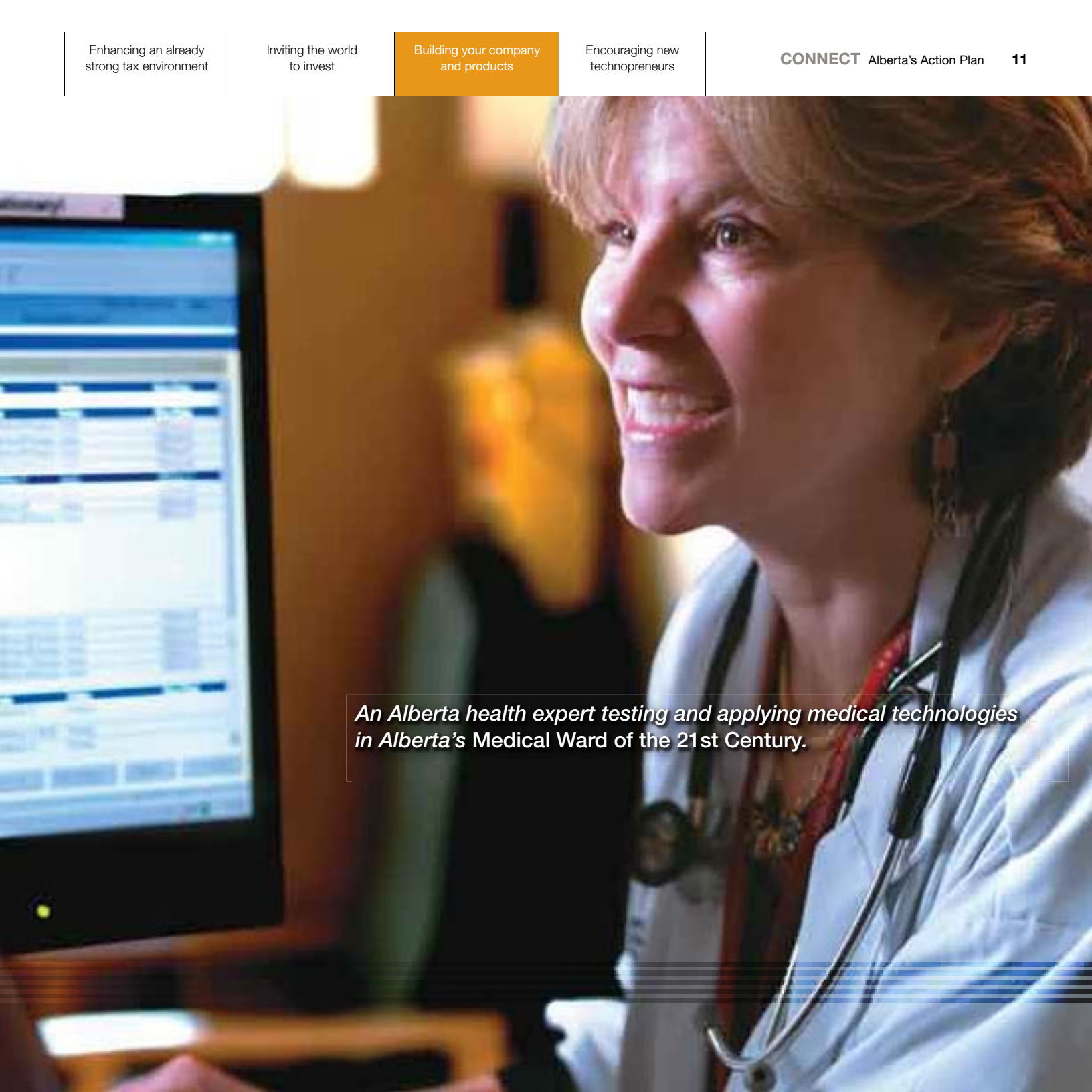
Financial – Finding access to capital, improving investment readiness.

People – Management capability and financial skills.


Product Improvement – Industrial design, prototyping, product engineering, lean manufacturing.

The province-wide network of TDAs will play an important role in brokering relationships and cooperation between companies and innovation agencies in regions.





*An Alberta health expert testing and applying medical technologies
in Alberta's Medical Ward of the 21st Century.*

A person wearing a white lab coat, a blue surgical mask, and a blue hairnet is working in a cleanroom. They are standing next to a large piece of industrial machinery, possibly a tablet press or a similar manufacturing machine. The machine has a large hopper at the top and a control panel with several buttons and dials. A red, yellow, and green indicator light is visible on the machine. The background is a clean, white wall.

*Alberta entrepreneurs can access design, engineering
and pilot-plant facilities through innovation vouchers.*

Action 5: Offer innovation vouchers

■ Offer innovation vouchers to assist companies in accessing technology-specific supports.

Our innovation vouchers will assist new and growing technology companies in getting the vital product and business development support they need.

By supporting young companies at a challenging time in the commercialization process, innovation vouchers will help overcome funding and development challenges faced by many new technology companies.

Innovation vouchers will be redeemable for services that companies need: access to labs, design and fabrication centres, marketing management and intellectual property services. Vouchers will provide funding either on a one-time basis or up to a lifetime maximum.

Ultimately, vouchers will assist in getting more new technology companies successfully to the demonstration or initial funding stage by helping them address their most pressing challenges.



Action 6: Prepare products for market

Prepare products for market through enhanced product commercialization centres.

An innovative Alberta company may have a fantastic concept for a product, but may need assistance to commercialize the product. That's where we can assist with new product commercialization centres.

We will also build on and align with current widely recognized services centres such as the Alberta Centre for Advanced Micro-Nano-Technologies Products, the Leduc Food Processing Centre and our research-based project facilities.

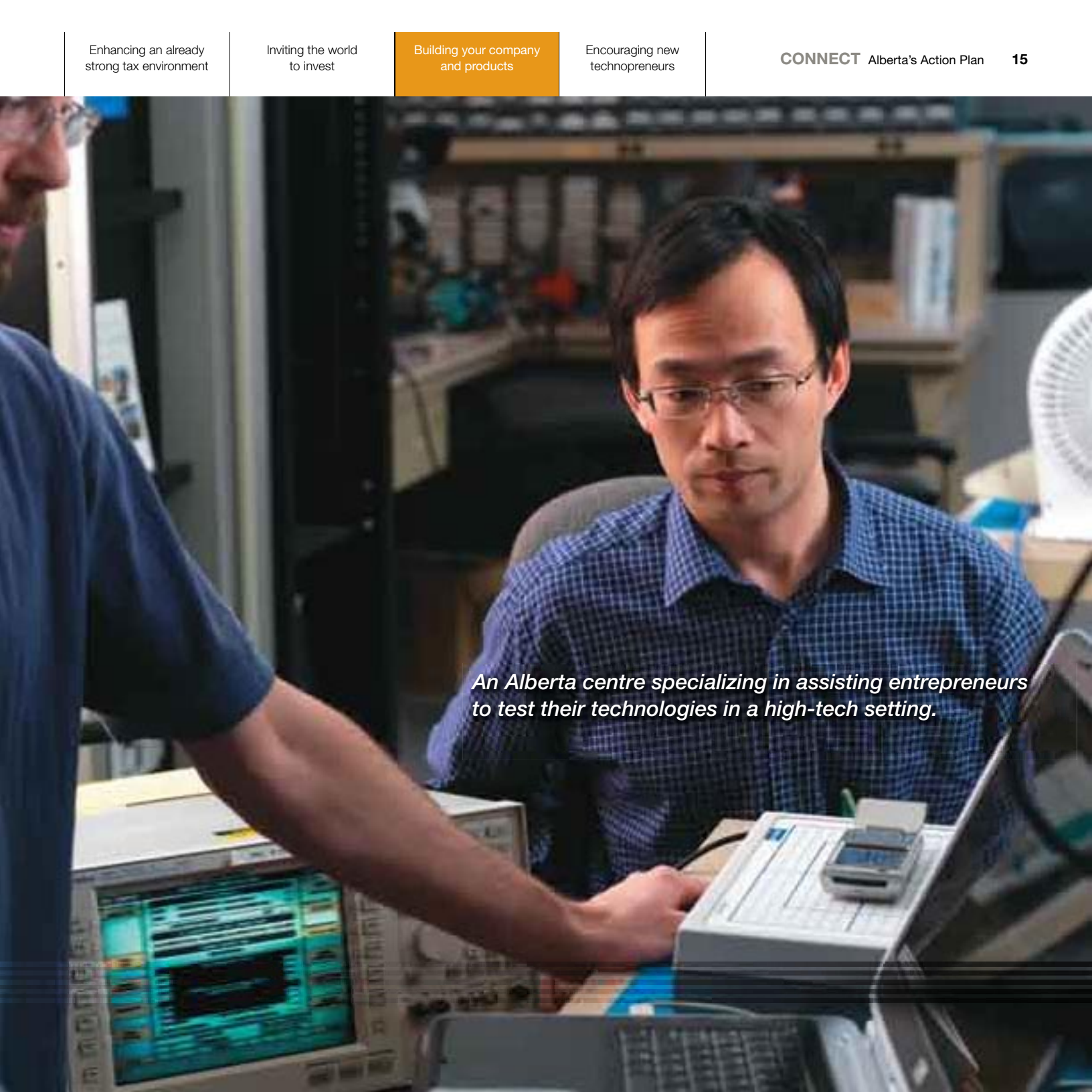
In the pre-commercial phase, start-up companies often need market analysis assistance, technical equipment, access to labs or test facilities, engineering and

design expertise, technical and market validation or accreditation services, prototyping support, product positioning, production planning and – ideally – a chance to demonstrate a new product in an actual customer setting.

These market-focused product commercialization centres will help companies address specific challenges, particularly in creating marketable new products and services to capture high-value global market opportunities.

These product commercialization centres will be directly linked to services provided by business development centres and technology development advisors.



A man with glasses and a blue checkered shirt is seated at a desk in a high-tech laboratory or office. He is looking intently at a laptop screen. To his left, another person's arm and hand are visible, pointing towards the laptop. The desk is cluttered with various pieces of electronic equipment, including a monitor displaying a complex interface with green and blue lines, a printer, and a mobile phone. The background shows shelves filled with boxes and other lab equipment, suggesting a busy, technical environment.

*An Alberta centre specializing in assisting entrepreneurs
to test their technologies in a high-tech setting.*



Scientists partnering with industry through Alberta's innovative iCORE program.

Action 7:

Create a demonstration fund for testing new products

■ *Create a demonstration fund for testing new products in real-life settings.*

On one hand, we have creative young companies with promising but unproven innovations. On the other, we have non-profit and public organizations looking for cost-effective solutions. Our Demonstration Product Fund will bring both sides together, ultimately benefiting both. Innovators, strategically matched with end users, will pilot test and showcase new solutions.

Using a competitive application process, projects will be screened and judged according to clear criteria related to commercial potential, technical feasibility,

innovation capacity and business commitment. Companies will work with their strategic client partner to identify a suitable plan for the project, the technology to be used, critical challenges, costs, other contributions, market-oriented outcomes and timelines.

Funding will go to the end-user organization, but the benefits will flow to the companies by making their products more ready for the market.



Action 8:

Expand the IVAC Capacity Builder program

Expand the IVAC Capacity Builder program for pre-commercial and seed stage technology companies.

We're assisting early-stage companies in ICT, life sciences, clean energy and nanotechnology to get the best possible start in their fields. How? We're committing additional funding to support the IVAC Capacity Builder program offered by AVAC Ltd.

The IVAC Capacity Builder program is providing the supportive environment – right here in Alberta – that start-up companies need to turn their ideas into marketable products or technologies.


The IVAC Capacity Builder program assists pre-commercial and seed stage technology companies in getting to the investor-ready stage so they can attract angel investors, seed funding and venture capital. Investments will subsequently encourage the development of mentorship capital, market assessments, business plans, prototypes and products.

And that's just for starters. We continue to look for ways to support organizations that are working with early stage companies.





*An Alberta air quality solution and environmental
technology that was financed for export to the world.*

A woman with long dark hair and glasses, wearing a black jacket, stands at the front of a meeting room. She is gesturing with her right hand while speaking to a group of people seated around a table. The room features a large projection screen displaying a presentation with horizontal lines and colored bars. A woman with short blonde hair and glasses, wearing a light blue sweater, is seated in the foreground, looking towards the presenter. Other people are visible around the table, including a man in a white lab coat. A computer monitor is visible on the left side of the room.

*An Alberta graduate student technopreneur
developing solutions for e-health.*

Action 9: Support Youth Technopreneurship

■ *Support Youth Technopreneurship and other initiatives to encourage and reward entrepreneurship.*

Developing an even stronger entrepreneurial culture within Alberta is key to increasing the number of talented people willing to take on the exciting challenges and risks of building more knowledge-based companies.

We are launching the **Youth Technopreneurship program**, a broad provincial initiative to unite the efforts of industry, educational institutions, service agencies, government and other organizations as they provide motivation, learning, support and opportunity for people who want to build their own enterprises.

The project will enable colleges, technical institutes and local communities to provide a period of incubation support to new technology-oriented business ventures. Interested and eligible youth will participate in a business plan competition and receive financial awards and start-up support to develop their companies.

Through our Youth Technopreneurship program, we're creating a rich and vibrant training ground that regularly launches new entrepreneurs who will assist in shaping Alberta's economic future and sustainable growth.



Creating Our Own Future

Knowledge is a resource that never depletes itself. In a global economy where knowledge has become the new wealth, Alberta is taking control of its own future.

Each of the actions outlined in this booklet will assist us in capturing the value of ideas and keeping the benefits here in Alberta.

With these actions, we'll be able to bring technology to the market faster. We'll make our robust economy even stronger and more diverse. We'll create a better environment for investors, innovation and value-added industries. And we'll assist in creating high-paying and challenging jobs for generations to come.

This Action Plan is only part of Alberta's plan to build the Next Generation Economy. As we increase our research commitments through organizations like iCORE and our post-secondary institutions, we will continue to be a magnet for international talent. Alberta is in the process of establishing a new innovation framework and a new Premier's Economic Council, all with a view to the Next Generation Economy.

As initiatives continue to roll out over the coming year and beyond, Alberta will increasingly become a choice destination for companies looking to establish and grow in a supportive environment.





Cover:

Dr. Wolfgang Tittel, iCORE/General Dynamics Canada Industry Research Chair in Quantum Cryptography and Communication (*Advanced Education and Technology photo*).

Inside cover:

Alberta Advanced Education and Technology Minister Doug Horner (*left*) and Premier Ed Stelmach observe technologies at Alberta's National Institute for Nanotechnology.

Capturing the Momentum:

Main image: Alberta is building the next generation economy now.

Images left to right:

- Industrial MRI application (*Advanced Education and Technology photo*).
- Logican Technologies Inc. (*Courtesy Alberta Economic Development*).
- David Martin and Nancy Knowlton, founders of Smart Technologies (*Courtesy Smart Technologies*).
- Entrepreneurs can access advanced materials testing facilities at the Alberta Research Council (*Courtesy Alberta Research Council*).
- Alberta's energy production technology (*Courtesy Suncor Energy Inc.*).

Action 1:

Main image: Syncrude Canada sweet blend (*Courtesy Syncrude Canada*).

Images left to right:

- Medical and health research, Alberta Heritage Foundation for Medical Research (*Courtesy Alberta Economic Development*).
- Assembly line at Logican Technologies Inc. (*Courtesy Alberta Economic Development*).

Action 2:

Main image: Jonathan Draper and Tom Kunimoto of Calgary Scientific Medical Group (*Advanced Education and Technology photo*).

Images left to right:

- Alberta-developed ICT prototype (*Advanced Education and Technology photo*).
- Alberta excels in imaging technology in the life sciences sector.
- Alberta is enhancing entrepreneurship opportunities.

Action 3:

Main image: Silvacom Ltd.'s Kevin Magnuson and fleet monitoring technology (*Advanced Education and Technology photo*).

Images left to right:

- Entrepreneurs at NEWT, the Network for Emerging Wireless Technologies (*Advanced Education and Technology photo*).
- Fibre-optic laser testing, Telecommunications Research Labs (*Courtesy Alberta Economic Development*).
- Optimum Communications Services at an Alberta business development center (*Advanced Education and Technology photo*).

Action 4:

Main image: The electronic patient record allows physicians to work on portable computers at bed side in the **Medical Ward of the 21st Century** (*Advanced Education and Technology photo*).

Images left to right:

- Dr. Gérard Lachapelle, CRC/iCORE Chair in Wireless Communication (*Advanced Education and Technology photo*).
- Personal Communication and interaction are recognized human factors in the **Medical Ward of the 21st Century** (*Advanced Education and Technology photo*).

Action 5:

Main image: Agri-food product exports from Alberta are growing into global markets.

Images left to right:

- Alberta's NanoFab is an open access nano-fabrication facility for university researchers (*Courtesy of NanoFab*).
- Value-added agri-food product development at the Leduc Food Processing Development Centre (*Courtesy Leduc Food Processing Development Centre*).
- Myotis Wireless testing Batlan™ technology (*Advanced Education and Technology photo*).

Action 6:

Main image: Engineers from Alberta company EmSCAN Corp. at an Alberta product development centre (*Advanced Education and Technology photo*).

Images left to right:

- Alberta has all scale of enterprises from start-up to mature firms working in international markets.
- Viscofiber, an Alberta-developed functional food product (*Advanced Education and Technology photo*).

Action 7:

Main image: Drs. Saul Greenberg and Sheelagh Carpendale, iCORE/SMART Technologies Industrial Research Chairs in Interactive Technologies Research; Dr. Ehud Sharlin, Assistant Professor, University of Calgary, uTouch Research Group (*Advanced Education and Technology photo*).

Images left to right:

- Innovative communications for high-tech health care in the Medical Ward of the 21st Century (*Advanced Education and Technology photo*).
- Dycor Technologies Ltd. provides air monitoring equipment to first-responders (*Advanced Education and Technology photo*).

Action 8:

Main image: Edgar Semler, President of Dycor Technologies Ltd. (*Advanced Education and Technology photo*).

Images left to right:

- Alberta is building the bridge from research to production.
- Alberta company, Micralyne Inc., provides a range of thin-film nanotechnology microelectronics and manufacturing assembly services (*Courtesy of Alberta Economic Development*).

Action 9:

Main image: Research Associate, Mona Motamedi, discusses technology applications at the **Medical Ward of the 21st Century** (*Advanced Education and Technology photo*).

Images left to right:

- Geomatics is a strong sector in Alberta with growing opportunities for young technopreneurs (*Advanced Education and Technology photo*).
- Established Alberta companies demonstrate the potential for growth (*Courtesy Smart Technologies*).

Creating Our Own Future

Main image: Suncor's Magrath Wind Power Project (*Courtesy Suncor Energy Inc.*).

Images left to right:

- Calgary Scientific Medical Group (*Advanced Education and Technology photo*).
- "CAVE" 3D imaging (*Courtesy University of Alberta*).

Contacts

Solutions from Dr. Tittel's work may have global impact on computer security (*Advanced Education and Technology photo*).



Contacts

For more information about *Alberta's Action Plan: Bringing Technology to Market* – or to find out how to access any of these supports in your region of Alberta – please contact:

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