LUXEMBOURG’S PROFILE

A HIGHLY STRATEGIC POSITION WITHIN THE EUROPEAN MARKET

• IN THE HEART OF EUROPE

Area: 2,586 sq km

Population: 500,000 of which 42% are foreigners

Languages: (Luxembourgish, German, French, English)

Currency: Euro

Political System: Constitutional Monarchy

Parliamentary Democracy

• FOUNDING MEMBER OF THE EUROPEAN UNION

• COMMERCIAL NEUTRALITY

• REACH 60% OF THE EU GDP IN LESS THAN A DAY
A STABLE AND FAVORABLE BUSINESS ENVIRONMENT

○ A STABLE SOCIO-POLITICAL ENVIRONMENT
  • SOUND MACROECONOMIC FUNDAMENTALS
  • ACCESSIBILITY AND BUSINESS MINDED GOVERNMENT
  • STRONG NATIONAL COHESION

○ A FAVORABLE LEGAL AND REGULATORY FRAMEWORK
  • HIGH RESPONSIVENESS TO RELEVANT EU LEGISLATION
  • PRO-BUSINESS LEGAL AND REGULATORY FRAMEWORK
  • PREDICTABLE AND REWARDING TAX ENVIRONMENT
A LEADING INTERNATIONAL FINANCIAL CENTER

... AT A GLANCE

- N° 1 INVESTMENT FUND CENTER IN EUROPE
  (second worldwide behind the USA)
- N° 1 WEALTH MANAGEMENT CENTER IN THE EUROZONE
- EUROPE’S LEADING DOMICILE FOR CAPTIVE REINSURANCE
- N° 1 FOR LISTING INTERNATIONAL BONDS IN EUROPE
MUCH MORE THAN JUST A FINANCIAL CENTER

A DIVERSIFIED AND DYNAMIC ECONOMY

- INDUSTRY
- MEDIA & E-COMMERCE
- LOGISTICS
- EUROPEAN INSTITUTIONS
- SERVICES
MULTI SPECIALIZATION DEVELOPMENT POLICY
BUSINESS CASES TAILORED TO NEEDS

OPPORTUNITIES OFFERED IN LUXEMBOURG FOR EXPANDING YOUR BUSINESS ACTIVITIES IN EUROPE

1. SET UP A EUROPEAN OR WORLDWIDE HEADQUARTERS
2. MANAGE INTELLECTUAL PROPERTY RIGHTS
3. ENHANCE RESEARCH & DEVELOPMENT ACTIVITIES
4. ORGANIZE EUROPEAN LOGISTICS
5. JOIN EUROPE’S E-COMMERCE AND ICT HUB
BUSINESS CASE: HEADQUARTERS
WHY THINK ABOUT LUXEMBOURG FOR A HEADQUARTERS?

- COORDINATION/MONITORING/STRATEGY
- FINANCIAL PARTICIPATION MANAGEMENT
- ACCOUNTING/REPORTING/AUDIT/LEGAL
- SALES/MARKETING
- GROUP FINANCING/TREASURY MANAGEMENT
- PROCUREMENT CENTER
- COMMUNICATION & IT SUPPORT
- SHARED SERVICES (e.g. logistics, R&D or IP)
- ...

luxembourg
for business
INCORPORATING A COMPANY: EASY AND STRAIGHTFORWARD

- COMPLETED IN A COUPLE OF DAYS
- ACQUIRES LEGAL PERSONALITY IMMEDIATELY
- NO RESTRICTIONS RELATING TO THE NATIONALITY, RESIDENCE OR STATUS OF SHAREHOLDERS, DIRECTORS AND MANAGERS
- ARTICLES MAY BE DRAFTED IN ENGLISH (with a French/German translation)
- ANY CURRENCY MAY BE USED FOR ACCOUNTING/REPORTING
- EASY WORK PERMITS PROCEDURE FOR QUALIFIED PEOPLE
A REWARDING CORPORATE TAX CLIMATE

• AVAILABILITY OF SOPHISTICATED INVESTMENT VEHICLES (SOPARFI, SIF, SICAR,...)
• COMPREHENSIVE PARTICIPATION EXEMPTION REGIME
• INVESTMENT TAX CREDITS
• ADVANTAGEOUS IP BOX REGIME
• LOSSES CARRY FORWARD PROVISIONS
• TAX CONSOLIDATION FOR ALL LUXEMBOURG COMPANIES
• ADVANCED CONFIRMATION PRACTICE
• EXTENDED NON DOUBLE TAXATION AGREEMENT NETWORK (75)
VARIOUS GLOBAL PLAYERS HAVE ALREADY CHOSEN LUXEMBOURG FOR THEIR WORLDWIDE OR EUROPEAN HEADQUARTERS

HOUSEHOLD NAMES

NEWCOMERS
EXAMPLE: MANAGING INTELLECTUAL PROPERTY RIGHTS

A REWARDING TAX REGIME FOR IP ACTIVITIES

• 0% WITHHOLDING TAX ON ROYALTY PAYMENTS

• NEW IP TAX LAW

Benefits

80% tax exemption of net income derived from qualifying IP as well as capital gains realized on disposal of such IP

100% exemption for net wealth tax for qualifying IP

Qualifying IP

Patents, Software copyrights, Designs or models, Domain Names and Trademarks (including franchise system)

Conditions

Acquire or create the IP rights after 31 December 2007

Activate related expenses in the balance sheet
NEW PARADIGM AS A KEY DRIVER: SHIFTING FROM TRADITIONAL TO « PERSONALIZED MEDICINE »

• **Today**: trial-and-error method!

• **Tomorrow**: The right drug, for the right person, at the right moment, at a right dosis

• Personalized medicine is based on molecular diagnostics and requires access to high-quality biological samples (tissue, blood, sputum, etc.).
Three complementary projects aiming at developing center of excellence in molecular medicine:

- Creation of the Integrated Biobank of Luxembourg in partnership with the Translational Genomics Institute (Tgen) Phoenix (AZ), as an engine to attract and fuel research initiatives

- Creation of a Luxembourg Center for Systems Biomedicine in partnership with the Institute for Systems Biology (ISB), Seattle (WA)

- Lung cancer biomarker validation project within the « Partnership for Personalized Medicine » (PPM), Phoenix (AZ) and Seattle (WA)

- $200 million, 5 year infrastructure program designed to attract private business investors
The Luxembourg PPM Demonstration Project

Define a new diagnostic for lung cancer in a timeframe of 3-5 years in order to improve treatment and potentially reduce the costs of treatment.

Identify with Luxembourg-based researchers biomarkers which could be the basis for new diagnostic discoveries.

Test locally the new diagnostic and prove its capacity to diagnose the disease.

Supervise the patient’s evolution in order to prove the health-enhancing and costs reductions of the treatment.

Create and run an econometric model to assess impact on national health scheme.
### Expected Returns on Investment

#### Research
- Ability to attract top scientists and ramp up existing research programs
- Leverage existing competencies
- Strong contributions to the education and health care systems.

#### Education
- Provide a well-educated workforce to support both economic and research activities.
- Create new training / education programs to support research.

#### Economy
- Research and education are key assets to attract foreign companies.
- Existing sectors (IT, air transport) can immediately benefit from the development of research activity.
- Business failures are not an issue if the research environment can continuously generate spin-offs and “recycle” personnel and intellectual property.

#### Health Care
- Health care and research are mutually reinforcing.
- Contain health-care costs upstream through personalized therapies and preventive medicine (diagnostics).
- A cutting-edge research enterprise facilitates the recruitment and retention of world-class physicians.
BUSINESS CASE: LOGISTICS

IN THE HEART OF EUROPE
BUSINESS CASE: LOGISTICS

5th LARGEST EUROPEAN FREIGHT AIRPORT

- SECURE, EFFICIENT AND SPEEDY GROUND HANDLING
  - Handling capacity of 1,200,000 t annual freight
  - Well-equipped for temperature sensitive goods
    (i.e. cool-chain guarantee, EU-certified veterinary station)
  - Quick turnaround time
  - Any European city can be reached in less than a day by road

- AIRLINKS TO ALL CONTINENTS
  Major hub for worldwide airfreight carriers
  (e.g. Cargolux, China Airlines, Yangtse, Atlas)
BUSINESS CASE: LOGISTICS

- **HINTERLAND PORT OF THE NORTH SEA**
  - DAILY RAILWAY CONNECTIONS TO THE PORTS OF THE NORTH SEA (i.e. Antwerp, Rotterdam, Hamburg)
  - CONTAINER HANDLING AND STORAGE FACILITY

- **INNOVATIVE MULTIMODAL SOLUTIONS (RAIL/ROAD)**
  - PIGGYBACK CONNECTION BETWEEN LUXEMBOURG AND SOUTH OF FRANCE
  (New routes through Europe are planned)
BUSINESS CASE: LOGISTICS

EASY AND FAST IMPORT/EXPORT PROCEDURES

- COOPERATIVE AND EFFICIENT CUSTOMS ADMINISTRATION
- TOWARDS A PAPERLESS ENVIRONMENT (e.g. e-customs, IAITA e-freight)
- AUTHORIZED ECONOMIC OPERATOR / FISCAL REPRESENTATION
- RECOGNIZED CERTIFICATION AND HOMOLOGATION AGENCY (CE-Certification) (for automotive, electronics components and medical devices)

DEDICATED INTERMODAL LOGISTICS PARKS

- EUROHUB CENTER (dedicated to air-freight logistics)
- EUROHUB SOUTH (predominantly rail-freight logistics)
QUALITY SERVICES OFFERED BY KEY PLAYERS
(illustrated below by some players)
FOR MORE INFORMATION: www.investinluxembourg.lu
BACKUP SLIDES
OPTIMISING LABOUR COSTS versus PRODUCTIVITY

LOWER TAXATION AND SOCIAL CHARGES

Example for a married person with two children earning 100,000 euros annually

<table>
<thead>
<tr>
<th></th>
<th>BE</th>
<th>FR</th>
<th>LU</th>
<th>UK</th>
<th>DE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total costs for EMPLOYERS</td>
<td>132</td>
<td>149</td>
<td>111</td>
<td>112</td>
<td>111</td>
</tr>
<tr>
<td>Tax/social charges</td>
<td>32</td>
<td>49</td>
<td>11</td>
<td>12</td>
<td>11</td>
</tr>
<tr>
<td>Gross salary</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Tax/social charges</td>
<td>48</td>
<td>29</td>
<td>28</td>
<td>32</td>
<td>36</td>
</tr>
<tr>
<td>Net salary for EMPLOYEES</td>
<td>52</td>
<td>71</td>
<td>72</td>
<td>68</td>
<td>64</td>
</tr>
<tr>
<td>Ratio Net/Cost (%)</td>
<td>39</td>
<td>48</td>
<td>64</td>
<td>60</td>
<td>59</td>
</tr>
</tbody>
</table>

Source: PWC

A HIGHLY PRODUCTIVE WORKFORCE

Labour productivity per person employed, EU 27 = base 100

Source: Eurostat
A REWARDING TAX ENVIRONMENT

TAX POLICY: REDUCE THE OVERALL TAX BURDEN

Corporate income tax
(nominal rate in % for 2009)

Value added tax
(standard rate in % for 2009)

Personal income tax
(highest marginal rate in % for 2009)

Source: KPMG
Source: European Commission
Source: KPMG
A REWARDING TAX ENVIRONMENT

LOWEST TAXATION PRESSURE WITHIN THE EU
Cost of all taxes borne by a company in EU member states, 2009

Source: Paying Taxes 2010, WB & PWC
Remark: The rates included in this graphic take into account the availability of investment tax credits that may offset the tax rate liability. Therefore the rates in this graphic may vary from others in this presentation.
A MOST ADVANCED ICT ENVIRONMENT

EXCELLENT INTERNATIONAL AND NATIONAL CONNECTIVITY

- REDUNDANT HIGH SPEED CONNECTIONS
  - Fiber optic networks to all major European POPs (e.g. Teralink, Luxconnect)
  - Satellite connectivity (SES)

- INTERNET EXCHANGE POINT
  (e.g. LIX, LU-CIX)

STATE OF THE ART INFRASTRUCTURES

- SECURE IT ENVIRONMENT
  (i.e. LUXTRUST)

- HIGH LEVEL DATA CENTRES
SET UP A EUROPEAN OR WORLDWIDE HEADQUARTER

LUXEMBOURG: THE IDEAL PLATFORM FOR COORDINATING AND MANAGING YOUR EUROPEAN BUSINESS

1. COORDINATION
2. REPORTING & LEGAL
3. GROUP FINANCING
4. PROCUREMENT CENTRE

Benefits to be in Luxembourg
- Benefit of the participation exemption regime
- Application of more than 50 NDTAs
- Possibility of tax consolidation
- Flexible company law
- No administrative red tape
- Attractive taxation for employees
- Low social contributions for employers
- Easy access to decision takers
- Etc.

Re-invest the profits in further expansion in Europe

Source: Deloitte, PWC
Remark: For in depth information please ask professional advice.
-BACKUP- BUSINESS CASE: IP

Intellectual Property
MANAGE YOUR INTELLECTUAL PROPERTY RIGHTS

- A PIONEER IN IP
  - ONE OF THE FIRST MEMBERS OF THE WORLD IP ORGANISATION
  - MEMBER AND SIGNATORY TO MAJOR IP BODIES AND TREATIES

- AN IP-CONSCIOUS GOVERNMENT
  - A WELL DESIGNED LEGAL AND REGULATORY FRAMEWORK FOR IP RIGHTS
  - ENCOURAGE AND SUPPORT IP ACTIVITIES MADE IN LUXEMBOURG

luxembourg for business
## Comparisons of Other New IP Tax Regimes in Europe

<table>
<thead>
<tr>
<th>CRITERIA</th>
<th>BELGIUM</th>
<th>LUXEMBOURG</th>
<th>NETHERLANDS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>BENEFITS</strong></td>
<td>Deduction of 80% of patent income</td>
<td>80% exemption on qualifying IP income</td>
<td>Deduction of 60% of IP income</td>
</tr>
<tr>
<td><strong>QUALIFYING IP</strong></td>
<td>Patents</td>
<td>Patents</td>
<td>Patents</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Software copyrights</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Trademarks</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Design and model</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Domain names</td>
<td></td>
</tr>
<tr>
<td><strong>CAPITAL GAIN</strong></td>
<td>Not covered</td>
<td>Covered</td>
<td>Covered</td>
</tr>
<tr>
<td><strong>NET WEALTH TAX</strong></td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td><strong>CEILING FOR THE EXEMPTION</strong></td>
<td>None (general arm’s length rule)</td>
<td>None (general arm’s length rule)</td>
<td>4 x IP production costs</td>
</tr>
</tbody>
</table>
EXAMPLE OF TAX BENEFITS WHEN MANAGING INTELLECTUAL PROPERTY RIGHTS FROM LUXEMBOURG

- **Royalties**
  - No or reduced WHT based on EU Directive or NDTAs
  - **Re-invest**

- **Foreign Subsidiaries**
  - No or reduced WHT based on EU Directive or NDTAs
  - **Re-invest**

**Tax benefits in Luxembourg**

- 80% Exemption on Royalty net income
- 0% Net Wealth Tax
- Effective Tax Rate of 5.72%
- Re-invest the benefits in further expansion in Europe

Source: Deloitte, PWC
Remark: For in depth information please ask professional advice.
Research and Development
ENHANCE YOUR RESEARCH & DEVELOPMENT ACTIVITIES

RESEARCH & DEVELOPMENT: A PRIORITY FOR THE GOVERNMENT

The Government has foreseen a 5-year investment programme to develop cutting edge skills and expertise in molecular medicine.

Source: Eurostat, Luxembourg Government
ENHANCE YOUR RESEARCH & DEVELOPMENT ACTIVITIES

○ PUBLIC INFRASTRUCTURES
  • UNIVERSITY OF LUXEMBOURG
  • PUBLIC RESEARCH CENTRES
    (ICT, health & biotechnologies, material & nanotechnologies)
  • INNOVATION TRANSFER AGENCY
  • INTEGRATION OF LUXEMBOURG R&D INTO EU NETWORKS

○ PRIVATE R&D CENTRES
  • AUTOMOTIVE
    ![Goodyear](image1) ![Delphi](image2)
  • MATERIALS
    ![CeRaTis](image3) ![HEIDRAG](image4) ![DuPont](image5)
  • INDUSTRIAL
    ![Paul Wurth](image6) ![ArcelorMittal](image7)
  • NEW TECHNOLOGIES
    ![IEE](image8) ![SES](image9)
CUSTOM-MADE R&D INVESTMENT SUPPORT

• BUSINESS PARKS/INCUBATORS

• REWARDING TAX ENVIRONMENT
  (e.g. Accelerated tax depreciation scheme with a rate up to 40%)

• R&D and INNOVATION AID SCHEME
  "General aid scheme to support innovative companies by co-financing their R&D activities"
  "Special aid scheme for young innovative enterprises to support their financial needs"

• INNOVATION LOAN
EXAMPLE OF GOVERNMENT CO-FINANCING IN A 5 MILLION EUROS R&D PROJECT FOR THE DEVELOPMENT OF A NEW PRODUCT

ELIGIBLE R&D COSTS

- Personnel costs (50%)
- Equipments (30%)
- Subcontracting costs (20%)

RESEARCH LEVEL

- Precompetitive Development (max aid rate of 25%)
- Industrial research (max aid rate of 50%)

CO-FINANCING LEVEL

NON-REFUNDABLE CASH GRANT OF 33% OF TOTAL ELIGIBLE R&D COSTS

Remark: The capital grant co-financing rate of 33% is the result of the hypothesis used in this example. This rate varies from project to project and is set after an indepth analysis of the R&D project.
BACKUP - HEALTH TECHNOLOGIES
The Integrated Biobank of Luxembourg - A Key Infrastructure

9 Competences:
- Molecular analysis
- R&D
- Commercial support
- Technologies
- Information systems
- Manage the statutory background
- Clinics annotation
- Warehouse and logistic

Primary functions:
- To standardize the methodologies (collection, conservation, patient consent);
- To collect the clinical datas
- To warehouse DNA, RNA, sérum, tissus, clinics annotations
- To develop partnerships, participate and maximise translational discoveries.
Leading scientists involved in IBBL

• Dr. Jeffrey M. Trent, PhD - President and Scientific Director of T-Gen (Translational Genomics Research Institute). Dr. Trent has worked during 10 years within the National Institutes of Health where he has founded and managed the laboratory charged to coordinate and finalize the Human Genome Project. Before his tenure at the NIH, Dr. Trent has been professor at the University of Michigan, where he was the head of the “comprehensive cancer center”.

• A knowledgeable Management Team: Damien Aps, Dominic Allen, Fay Betsou
The Luxembourg Centre for Systems Biomedicine (LCSB)
Leading scientists involved in the LCSB-ISB project

Prof. Rudi Balling - Director of the Luxembourg Centre of Systems Biomedicine (University of Luxembourg). In 1993 Dr. Balling became Director of the "Institute of Mammalian Genetics" at the Helmholtz Center for Environment and Health in Munich. In 2001 he took over the position as Scientific Director of the Helmholtz Center for Infection Research in Braunschweig which he held until his move to Luxembourg in October 2009.

Dr. Leroy Hood, Co-founder and Director of the Institute for Systems Biology. Dr. Hood founded or co-founded 14 companies, including Amgen, Applied Biosystems, Darwin, Rosetta and the Accelerator and helped catalyze paradigm changes in biology (a.o. he pioneered new integrated and high throughput technologies in biology, systems biology and P4 medicine).
The Partnership for Personalized Medicine (PPM)

Partner Roles in PPM

**Partner**
- Identify health care needs and major health costs
- Clinical expertise
- Identification and analysis of target disease
- Decision tree analysis; Health economics

**PPM**
- Funding to develop test; Patient samples
- Biomarker discovery and development; Define performance criteria
- Proteomic analysis and production
- Refinement of test

**Patient population; Health IT data systems**
- Clinical implementation and validation; Iterative feedback process

**Reimbursement for diagnostic test**
- Improved disease management, reduced costs
THE LUXEMBOURG HEALTH TECHNOLOGIES INITIATIVE

Leading Scientists

• Dr. Guy Berchem, MD - Head of the “Laboratoire d’Hémato-Cancérologie Expérimentale” of CRP-Santé. Dr. Berchem also holds a clinical position as attending physician in Onco-Hematology at Centre Hospitalier in Luxembourg.

• Dr. Bruno Domon - Head of the new Clinical Proteomics Unit at CRP-Santé. Formerly head of the mass spectrometry Lab and biomarker program at the Institute of Molecular Systems Biology at ETH Zurich.

• Dr. Leland Hartwell - President and director of the Fred Hutchinson Cancer Research Center, Seattle. In 2001 Dr. Hartwell received the Nobel Prize in Medicine for his discoveries of the mechanisms of cells division. Arizona State University recently announced the appointment of Dr. Leland “Lee” H. Hartwell who will establish and co-direct the Center for Sustainable Health at ASU’s Biodesign Institute.
Tomorrow: Roadmap towards a Luxembourg Centre of Public Health and Medicine

Faculty of Medicine

Centre for Bioengineering

Human Genetics & Genomics

Mouse Genetics & Genomics

Metabolomics

Bioinformatics Core Facility

Centre for Preventive Medicine

Centre for Translational Research

Preclinical & Clinical Imaging

HT-Technologies

Computational & Systems Biology

LCSB-IBBL-CRP-Sante-ISB-....
BACKUP - LOGISTICS
NO VAT PRE-FINANCING FOR THE IMPORT OF GOODS

A guaranteed and automatic mechanism

- Free up capital tied up in VAT pre-financing
- Reduce cost of capital needed for VAT pre-financing

Source: PWC
EXAMPLE OF VAT SAVINGS WHEN DISTRIBUTING 50 MILLION EUROS OF GOODS ACROSS EUROPE FROM LUXEMBOURG

### VAT SAVINGS CALCULATOR

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average VAT of destination countries (e.g. France, Germany, Belgium)</td>
<td>19.86%</td>
</tr>
<tr>
<td>Costs of Capital (including opportunity cost)</td>
<td>12%*</td>
</tr>
<tr>
<td>Inventory Turns in Luxembourg DC</td>
<td>6</td>
</tr>
<tr>
<td>Average number of days to recover VAT pre-payment</td>
<td>30</td>
</tr>
<tr>
<td>Average Capital tied up in VAT-prefinancing</td>
<td>2,471,164 EUR</td>
</tr>
<tr>
<td>Annual cost of capital required for VAT pre-financing</td>
<td>296,540 EUR</td>
</tr>
</tbody>
</table>

Distributing 50 million EUR of goods across Europe from Luxembourg will:

- Free up around 2.5 million EUR of capital *(on average)*
- Reduce cost of capital by nearly 300,000 EUR *(annually)*

* This number is just for the use of this example.