

*Geneva Forum for Sustainable Investment*

March 26, 2009

**REAL-TIME ENERGY EFFICIENCY**

# The Story



- The founder of MCR&D is active in energy metering since 1998
- Vision of the founder, Daniel Rey
- New start in March 2008



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# Business Environment



- Although energy metering has existed for some time...  
...the marketplace was initially slow to react (*it was the boom times...*)
- Times have changed, energy-savings are now a priority for companies:  
*higher energy costs and environmental considerations are driving commercial interest...*  
*...aided by new regulations that are now in place*
- Smaller companies are ready first
- Utilities are slow to react

—————→ **MCR&D is addressing a “nascent” market  
with the right product at the right time**



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# Energy Efficiency & the Environment



- Energy sources dwindling
- Energy tariff increases
- Business Processes not considering energy use
- Electricity, gas, fuel, water, heating are used inefficiently
- Sensitivity to Global-Warming - the “Green” wave
- Liberalization of the electricity market
- Cost cutting and control have become critical

**Energy Management is of Vital Importance**



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# Our Solution for Energy Efficiency



- *strategy*  
**supervise, manage and optimize energy consumption**
- *focus:*  
**real time, remote control of all types of energy**
- *method:*  
**capture data & securely transmit it for Analysis, Management & Control**
- *objective:*  
**Energy Cost Reduction**
  - avoid going over-budget with unexpected charges
  - avoid consumption “peaks”
  - identify abnormal consumption
  - identify optimized needs



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# Customer Testimonials



**MANOR**

*"... the competence of the staff and vast adaptability of the WatchBox Solution have enabled us to concentrate entirely on energy management of our 46 biggest stores..."*

*Jean-Marc Braun, MANOR Hauptsitz, Facility & Security Management*



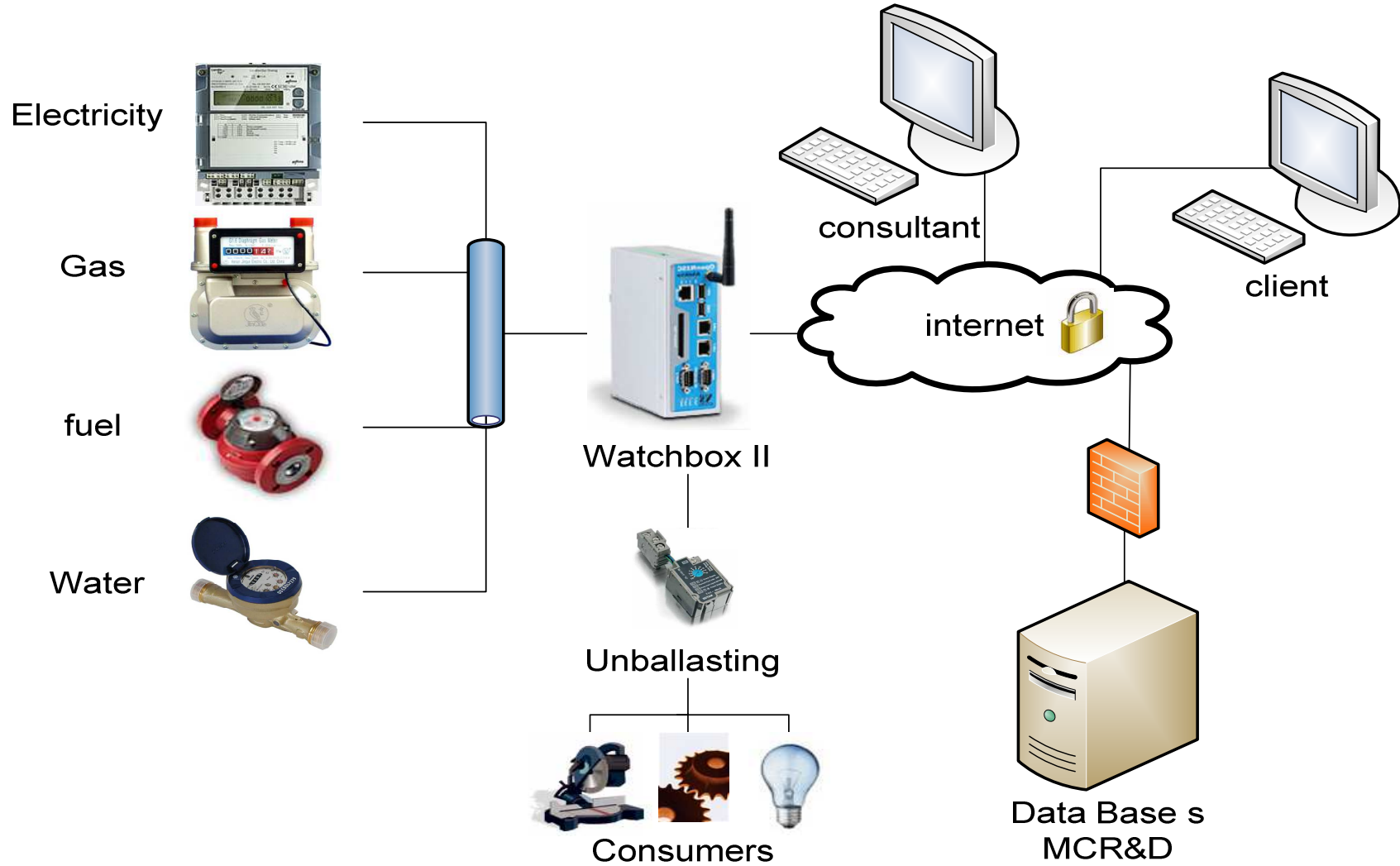
*"...I pay between 22'000 and 25'000 francs of electricity per year. I have already largely amortized my initial investment..."*  
*Claude-Alain Besse, manager of 3 Verbier restaurants.*



*"...the load balancing has allowed our operational charges to be reduced and the return on investment to be positive in less than 8 months..."*  
*Frédéric Gay, directeur Zinguerie, Sablage et Métallisation, Sion*

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# Function



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# Features



## 1. Real time, remote supervision

Always on, continuous access

## 2. Analysis

Classify and qualify data

Reports & conclusions

## 3. Proactive energy management

Energy load profiles

Consumption planning

# Features



## 4. Sub-Metering

For analysis of consumption load breakdown

## 5. Auto-Manage & Cost Reduction

Immediate savings

Unballasting = Automated control

Alarms/Alerts

## 6. No client infrastructure or expertise required

Web based

Data on MCR&D servers

# Competitive advantages



- **Weak competition**
  - 10 with lower quality or partial solutions
  - Few real, but target large clients only, and not real time!
- **Key Competitive Differentiators**
  - 24/7 real-time
  - By the minute
  - Multi-energy & Multi-site
  - Secured remote access via Internet
  - Always compatible
  - Scalable for :
    - small enterprises
    - sub-segments
    - machines

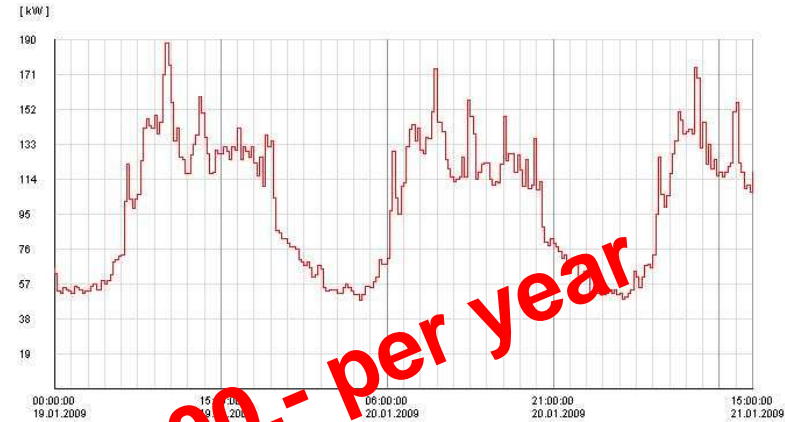
# Case Study 1



## Hospital (Crans-Montana)

Transmission of orders for unballasting from supervision of the heating, ventilation and closing of a kitchen washing tunnel

Jan. 09: 187 kW  
Mar. 09: 143 kW



**Difference 44 kW or CHF 8'800.- per year**

**Investment : CHF 10'820.-**



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## Case Study 2

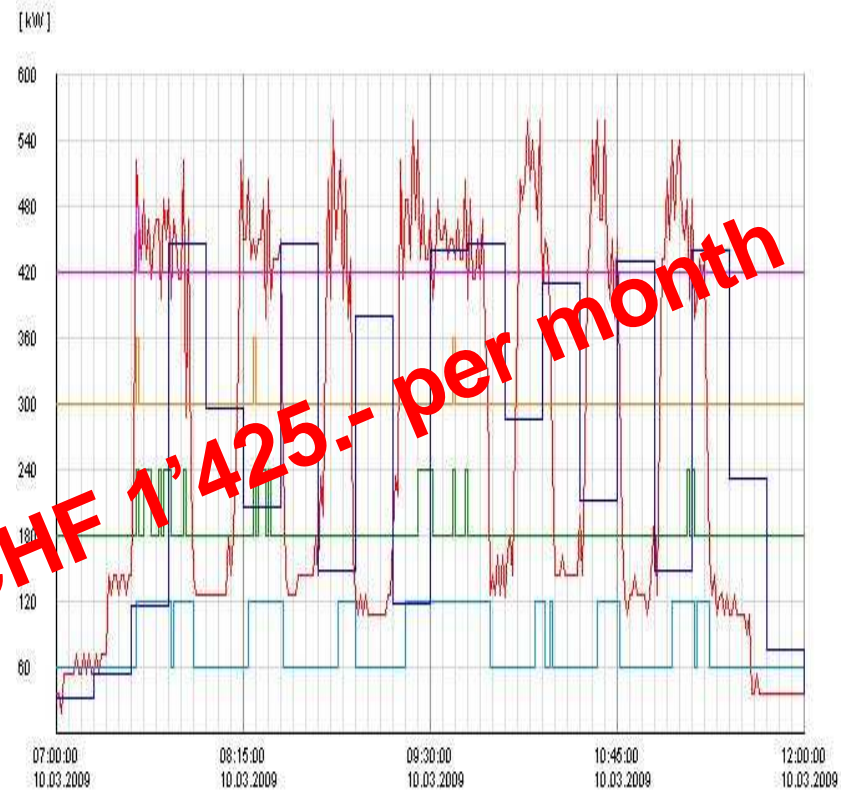


### Metallurgy Industry (Sion)

By-pass of the regulating thermostat before the temperature regulator for a Zinc furnace (11 tons of zinc in fusion)

Jan. 07: 640 kW  
Mar. 07: 450 kW

**Difference 190 kW or CHF 1'425.- per month**



**Investment : CHF 7'650.-**



# Application areas



## 1. Seven Main Segments

- Hotels & Restaurants
- Medical Establishments
- Industry (SME +)
- Franchise chain stores
- Municipalities
- Leisure & Entertainment entities
- Energy Distributors

## 2. Additional remote monitoring & control applications

- Gas supply (GPRS connection)
- Petrol or Fluid production (Satellite uplink)
- Any consumption: Shipping
  - Sophisticated telemetry
  - Residential projects,
  - Heat energy coupling etc.

# Business model



## One-off revenues

- WatchBox sales            low price, volume
- Installation                by MCR&D and/or partners

## Recurring revenues

- Basic report                pushed weekly

## Maximization of recurring revenues

- Advanced reports        customization
- Unballasting              automated optimization
- Alarm/Alert                in development
- Audit/Consulting         direct and/or through partners

# Swiss and International presence 2009



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# Development stages



- 2007** Opportunistic sales with relatively unstable IT
- 2008** IT fix and strategic market tests *Revenue: 200 KCHF*
- 2009** Larger sales force with clear focus and Swiss partnerships *Target: 1,830 KCHF*
- 2010** Consolidating Swiss market  
Increasing international licensees *Target: 4,070 KCHF*

# Product Plan: on time



- **15 Nov 2008:** **Release Phase 1** **Done**  
WatchBox-II launch
- **31 Dec 2008:** **Release Phase 2** **Done**  
Additional website features.  
Improved control & viewing facilities/reporting
- **31 Mar 2009:** **Release Phase 3**  
Local unballasting WatchBox-II  
Local web interface and outputs management
- **30 Jun 2009:** **Release Phase 4**  
Interfacing to commercial energy management software  
Advanced website features & reporting
- **31 Dec 2009:** **Release Phase 5**  
Database capacity for over 1'500 WatchBox's  
New database & web site design. Functionalities++.

# Investments



## Recruitment

- 5 sales managers
- 1 Development engineer
- 1 Sales Operations assist
- 1 Product Marketing manager
- 2 months of a Data Base specialist

## Investments

- New Server equipment
- New sales offices in Vaud and East Switzerland areas

## Financing

- 500 KCHF to 1,000 KCHF needed at mid 2009

# Management



## Total of 20 years experience

**Frank Kessaratos** - CEO

Experienced, multicultural executive, participating in global market development for over 20 years, in Telecommunications, Banking IT and Broadcast Video segments. Executive positions at Cisco, Harmonic, Temenos, Alcatel, Landis & Gyr (VP Sales & Marketing).  
Major in Electrical Engineering (MScEE)

**Daniel Rey** - Development, Marketing & Sales

HES engineer, lengthy experience in Telecom, Process Engineering and Energy Control. Expert in industrial process and flow management, co-developed the WatchBox in collaboration with EPFL & HEVS.

**Philippe Pépin** - Technology and Services

EPFL engineer, IT consultant very experienced and pragmatic in IT development for start-ups. In charge of development, maintenance and production.

**Sandro Barth** - Watchbox and IT development

EPFL engineer, acquisition specialist and development engineer. Co-developed the WatchBox in collaboration with EPFL & HEVS.

# Contacts



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# Real Time Energy Efficiency



***THANK YOU!***