BlasCom IT

IT & TELECOM STRATEGY

"Advice and Accompaniment"
for implementation of eco-technologies
solutions to reduce the costs
by increasing the energy efficiency.

*Information technologies
in the heart of initiatives in domains
of "Green IT" and "eco-innovations".*

ITU
and climate
change

Summary

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1. Introduction

Green IT

Marketing argument or real citizen and industrialist approach?

It is indisputable that the environmental protection is part of key points for every industrial actor, in the sector of the IT, as in the others.
It is probably that this argument has been used sometimes frivolously to value a brand or a range of products.

But it seems that, the crisis helping, the main actors became aware that the green IT, with all their reductions of costs, was a real economic approach, perfectly on-line initiative with the financial and commercial objectives.

So, the large companies, the state, regional and local authorities and the other major service actors put the Green IT as one of the main axes of development for the next years.

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2. Reduction necessity of the energy consumption and the carbon footprint

The hunting in the superfluous Kilowatts

Most of the large companies undertook in an approach of reduction of the electric consumption of their products or services.

Everybody is concerned in the field of "IT", from manufacturers of terminals to the suppliers of datacenters, by way of equipment manufacturers.

The electric consumption of datacenters industry increases from 25 to 30 % a year, because the manufacturers produce machines always more powerful.

The use of Internet, at worldwide level, increases by 100 % a year, the electric consumption of each of the network layers, increases simultaneously.

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3. Waste Management and Eco-conception

The recycling: an essential stake, but not sufficient…

Every year, between 20 and 50 millions tons of electronic waste are produced on the planet.
This figure is in increase from 3 to 5 % a year. In front of such a report, the industry of
"IT" began to mobilize. Most of the big actors set up a system of successful recycling.
But the reflection on the recycling, to be effective, has to begin from the conception of products.

To manage products on all the life cycle, is thus, essential.
Labels in place do not seem rather demanding or not rather exhaustive.

But decrees* and ministerial directives ** impose statutory obligations in term
of recycling and re-use *** for companies using IT hardware equipments.

The eco-conception thus became a concept more than ever, necessary,
in the sustainable development.

*   *French Decree n°2005-829*

** *WEEE Directive : Waste Electrical and Electronic Equipment*
*** *Art. 22 of the Decree*

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4. Solutions based on IT, in order to participate actively in the sustainable development

**One of the constituents, indispensable to this development:
the dominating role of IT solutions and Telecoms.**

If services of remote communications offered by the industry of telecoms,
go to the reduction of movements and thus, a reduction of CO_2 emissions,
the actors of this market have to make again a lot, to reduce their environmental footprint.

Indeed, IT industry, by rejecting about 185 millions tons of CO_2 at the world level,
is an industry which emits so much that of the civil aviation.
A doubling of these broadcasts, in less than 4 years, is planned.

However, the awareness seems to be engaged, and concrete actions are a reality
in the domains of the energy saving and the recycling, in particular.

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5. BlasCom IT helps you, from phases of decision to the implementation of relevant and measurable solutions

The technicality being complex, neutrals and objectives advices, are imperative before any implementation.

IT solutions can and must be managed, with the other solutions of the various fields of expertise and activities.
Adequate solutions can be defined individually, after a precise audit of every company or township authority, but various axes of solutions can be evoked,
classified in 2 mains categories: « IT 4 GREEN » and « GREEN 4 IT »

« IT 4 Green » on services:

- Implementation of audio conference, video conference, or tele presence solution, to reduce movements
   of your co-workers and thus, CO_2 emissions.
   This solution can be implemented either on your PSTN telephone network, or on your digital TOIP network.

- Implementation of a solution aiming at the "zero paper", thanks to solutions of dematerialization.

- Use of "Geomatics" (satellite applications) for a sustainable management of the services and the territories
    (water resources, traceability of agricultural productions, risk prevention, town and country planning and
     development).

- Home working or remote working, with a coded and secure connection, and a solution of unified communication.

 - Solutions of ' collaborative work ' with documents sharing, and a dynamic display.

- Global IT responsible Purchase strategy, Printing Management, etc…….

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5. BlasCom IT helps you, from phases of decision to the implementation of relevant and measurable solutions

IT 4 GREEN

« IT 4 Green » on the conception of your premises or their arrangement

- "Intelligent buildings", implementing an IT management (BMS: Building Management System) integrating CEI, ISO and ITU standards, using complex computing tools based on techniques of artificial intelligence by prediction analysis, and management of the energy consumption.

« IT 4 Green » on your electric installation

- Implementation of an external solution by optimization of buildings energy consumption with system of telecommunications modulating the consumption on the electric heating and air conditioning systems. (based on the thermal slowness of buildings)

- Implementation of electrical plugs, managed by your IP network.

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5. BlasCom IT helps you, from phases of decision to the implementation of relevant and measurable solutions

GREEN 4 IT

« Green 4 IT» on infrastructures of your Datacenters :

- Reduction of energy consumption within your datacenters by the optimization of air conditioning (module placed inside the racks of your arrays, getting the heat directly to the source)
- Virtualization Solutions Implementation to reduce your number of servers, hosting your applications, as well as the various databases.
- "Internal" Mutualization of IT equipments
- Solution of "Cloud Computing" to mutualize 'externally,' part of your information systems and their associated infrastructures. (Internal / External / Private Cloud)

« Green 4 IT» on infrastructures of telecom network :
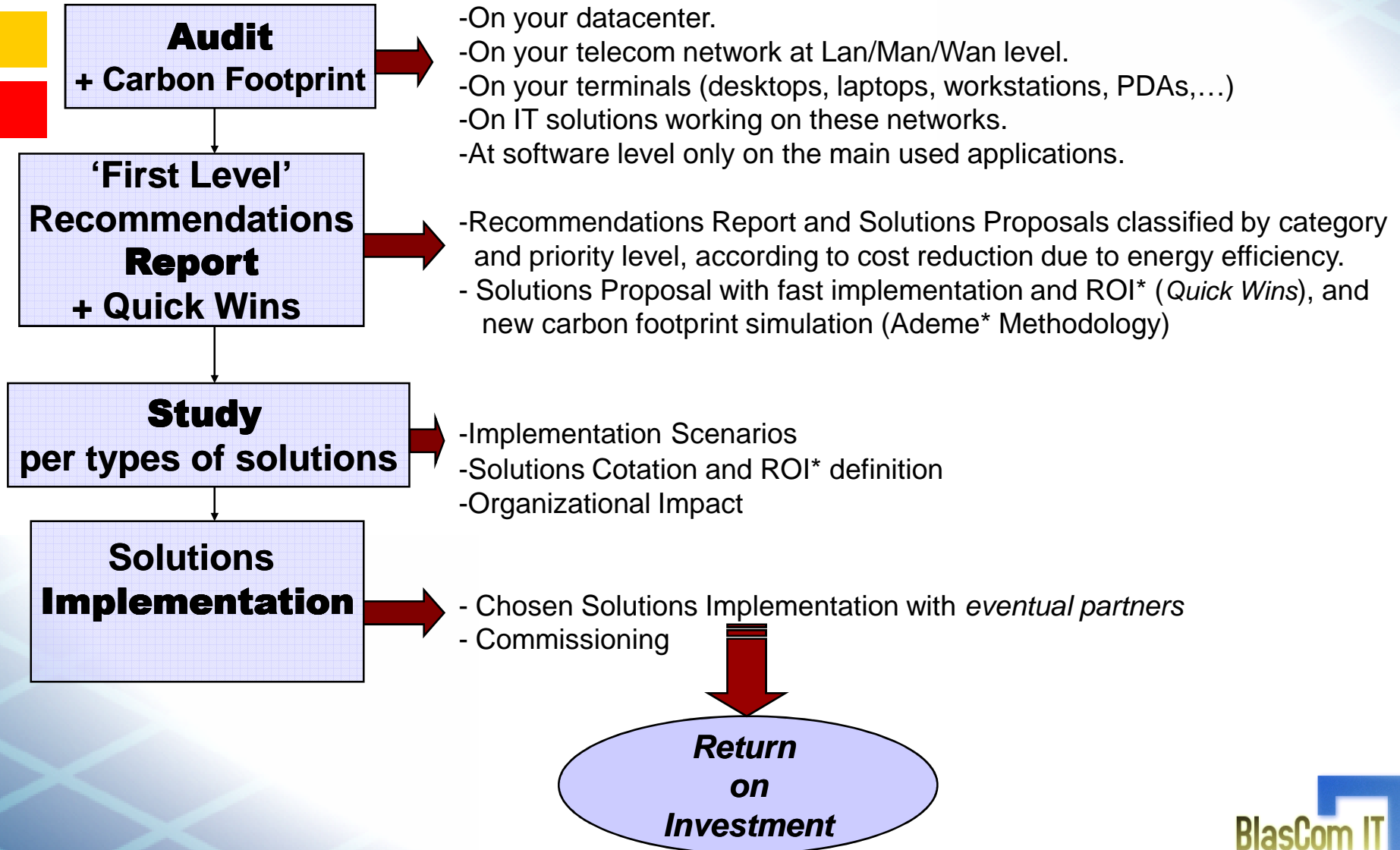
- Deployment of LAN networks with an optical ring structure with Active Points of Consolidation (PCA), allowing a reduction :   (Comparative for a building of 16000M2)
        * 95 % of the total length of copper cable,
        * 92 % of the total weight of the cables,
        * 11 % the global consumption of the LAN and 31 % by switched port.
        * around 20% for the Capex and 40% the Opex

« Green 4 IT» on your PCs and Workstations environnement

- Optimization Tool Use concerning the electric consumption by raising information (state, consumption) of the park machines to a centralized console allowing to isolate the abnormal overconsumption and to remedy it.   (1PC / year = 100€)
- Workstation Virtualization.

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6. The « IT – Energy Efficiency » Methodology
How BlasCom IT proceed to get measurable results ?

Audit + Carbon Footprint

-On your datacenter.
-On your telecom network at Lan/Man/Wan level.
-On your terminals (desktops, laptops, workstations, PDAs,…)
-On IT solutions working on these networks.
-At software level only on the main used applications.

'First Level' Recommendations Report + Quick Wins

-Recommendations Report and Solutions Proposals classified by category and priority level, according to cost reduction due to energy efficiency.
- Solutions Proposal with fast implementation and ROI* (*Quick Wins*), and new carbon footprint simulation (Ademe* Methodology)

Study per types of solutions

-Implementation Scenarios
-Solutions Cotation and ROI* definition
-Organizational Impact

Solutions Implementation

- Chosen Solutions Implementation with *eventual partners*
- Commissioning

Return on Investment

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7. A relevant Vision of the BlasCom IT's consultants

Due to it specialization, *BlasCom* IT
propose services to 3 types of clients :
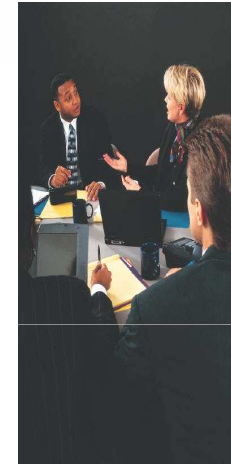
-**State, regional
and local authorities**

- **EPIC**

(Public enterprise of commercial interest)

- Telecom **Operators**

- Telecom **Manufacturers**

Larges Companies using their own telecom networks
(Bank, Energy, Pharma, ….)

**BlasCom IT suggests you to be accompanied on
eco-technological solutions, connected exclusively to IT,
to better understand today, plan tomorrow, and optimize durably the
energy and organizational efficiency of your company.**

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Some *BlasCom IT* references

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ITU and climate change

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BlasCom IT *is a company participating in the*
'Global compact Local Network ' *charter of the United Nations,*
to make a commitment in favor of practices, among others, of
development and distribution of environment-friendly technologies.

BlasCom IT *has also been incorporated into the DCICC: Dynamic*
Coalition on Internet and Climate Change, depending on the International
Telecommunication Union (ITU) and counting 40 companies and/or
authorities at worldwide level.

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