



“ CRESTEREA EFICIENTEI ENERGETICE FOLOSIND SOLUTII INTELIGENTE DE BMS IN EXPLOATAREA CLADIRILOR ”

Tehnologiile inovative care asigura conectivitate, dezvoltate de Honeywell, creeaza un mediu curat si mai sigur si mai sustenabil, asigurand o crestere a eficientei energetice si a productivitatii.

Honeywell

THE POWER OF CONNECTED

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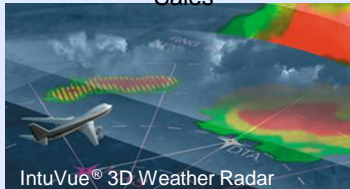
This document contains certain statements that may be deemed "forward-looking statements" within the meaning of Section 21E of the Securities Exchange Act of 1934. All statements, other than statements of historical fact, that address activities, events or developments that we or our management intends, expects, projects, believes or anticipates will or may occur in the future are forward-looking statements. Such statements are based upon certain assumptions and assessments made by our management in light of their experience and their perception of historical trends, current economic and industry conditions, expected future developments and other factors they believe to be appropriate. The forward-looking statements included in this release are also subject to a number of material risks and uncertainties, including but not limited to economic, competitive, governmental, and technological factors affecting our operations, markets, products, services and prices. Such forward-looking statements are not guarantees of future performance, and actual results, developments and business decisions may differ from those envisaged by such forward-looking statements. We identify the principal risks and uncertainties that affect our performance in our Form 10-K and other filings with the Securities and Exchange Commission.

Directii principale de activitate Honeywell

\$38.6B Global Industrial Company, Segment Margin of 18.8%
~53% of Sales Outside U.S.

Aerospace

\$15.2B
Sales



Unmatched Scope of Offerings

- Mechanical, Cockpit, and Software Offerings From Nose to Tail
- Apps, Services, Maintenance, Subscriptions
- End-to-End Connectivity Solutions From Hardware to Airtime
- Turbochargers for Fuel Efficiency

Reflects 2015 Full Year Results

Performance Materials and Technologies

\$9.5



Winning Technology

- Refining and Petrochemical Catalysts
- Gas Processing Modular Offerings
- Solstice® LGWP Materials
- SmartLine Transmitters
- Asset Optimization Software

Home and Building Technologies

\$9.2B
Sales



Connecting Homes and Buildings

- Security and Fire
- Connecting Homes With Lyric
- Open Software Connecting "Internet Of Things" in Buildings

Safety and Productivity Solutions

\$4.7B
Sales



Connecting Workers

- Wireless, Voice, Mobility, Data Analytic Solutions for Workers
- Warehouse Automation
- Keeping Workers Safe

Home and Building Technologies



Linii de Businesses:

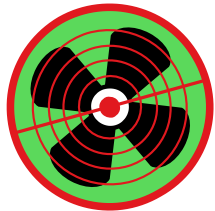
- Environmental and Energy Solutions
- Honeywell Security and Fire
- Smart Energy
- Honeywell Building Solutions

Sediu Central:
Atlanta, Georgia

Tehnologii:

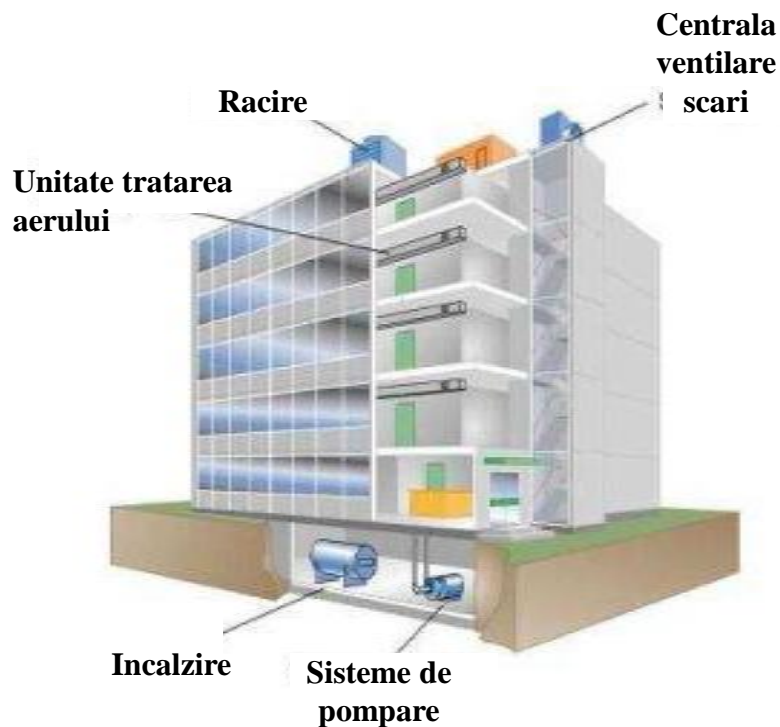
- Confort si Securitate in case
- Sisteme de comanda si control in cladiri
- Sisteme de detecti'e si alarmare a focului si gazelor
- Monitorizare de la distanta a sanatatii

Sisteme de control integrate in cladiri:



- Incalzire – sursa de caldura, distributie
- Racire – sursa de racire, distributie
- HVAC - aer conditionat, distributie,
- Control camera- control individual (H/C, ventilatie, iluminat, jaluzele)

Sisteme de control (HVAC)



- Detectare scurgeri gaze si fluide
CO (garaj), CH4 (sala cazane), lichid racire (racire motor)

- Masurarea consumurilor de energie
contoare de: H/C, electrice, apa si gaz

- Controlul iluminatului
- Control general si individual lumini
- Jaluzele
- Control jaluzele
- Statie meteo

- Alte sisteme
lifturi, control acces, audio-video etc.

Actiuni principale de optimizare a consumurilor in cladiri

- ***Automatizarea incaperilor (încălzire / răcire):***
- Înlocuirea ventilelor termostactice cu comenzile individuale de cameră care transmit cererea de energie pentru generatorul de energie (centrala termica, chiler), de exemplu controlere Merlin, Serval sau Lynx conectate la controlerele de integrare Eagle, Eagle Hawk sau Hawk

- ***Automatizarea instalațiilor de distributie (generarea și distribuția energiei termice și de răcire):***
- Cerințele energetice ale consumatorilor (circuitule de încălzire) trebuie transmise către generatoare (cazane, răcitoare). Implementarea funcțiilor optimizate de pornire/oprire, utilizarea/integrarea pompele cu viteză variabilă și controlul secvenței de generare a energiei care urmează nivelul de eficiență.

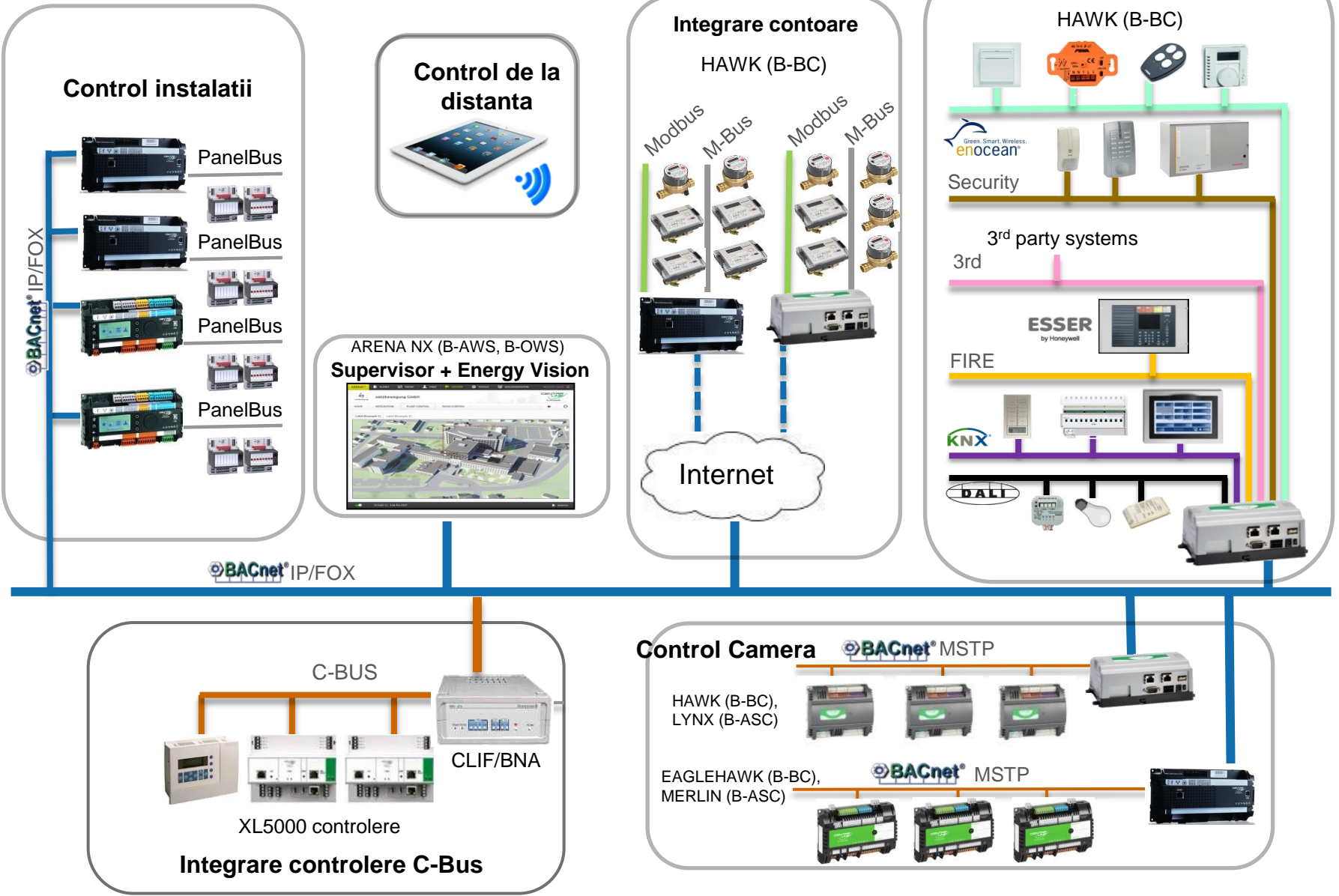
- ***Aer conditionat:***
- Cuvintele cheie sunt controlul in functie de sarcină, compensarea temperaturii exterioare, entalpie și controlul umidității.

- ***Iluminat:***
- O atentie sporita este asupra detectării automate a prezenței și asupra controlului automat al iluminării.

- ***Îmbunătățiri ale functionarii:***
- Detectarea erorilor în BMS, monitorizarea consumului de energie și a temperaturii interioare.

- Toate funcțiile sunt disponibile in platforma de dezvoltare si configurare COACH NX, ele urmand sa fie descarcate in controlere, permițând atingerea clasei de eficiență A.

Arhitectura generala BMS



Arhitectura BMS

*Nivel de dispecerat
(Management energetic)*



ARENA^{NX}



Nivel de integrare



HAWK

Nivel instalatii



EAGLE



EAGLEHAWK

*Nivel control de
camera*



LYNX



MERLIN

Modul de camera



ZIO

DISPECERATUL ARENA NX

- Bazat pe noua generatie de tehnologii - **NIAGARA 4**
- ARENA NX oferă funcții și caracteristici puternice pentru a satisface nevoile unui sistem integrat de management al clădirii
- ARENA NX Ajută la maximizarea eficienței operaționale și la minimizarea costurilor












ARENA NX



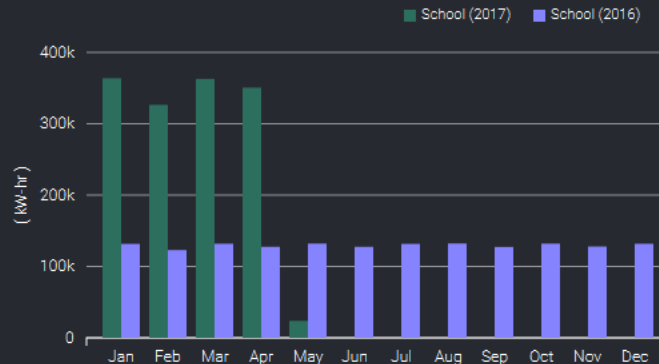
ARENA NX + Energy Vison

CENTRA^{LINE}
by Honeywell

-  Homepage
-  Energy Vision Dashboard
-  Energy - Benchmarking
-  Energy - Consumption
-  Energy - Pie Chart
-  Energy - Ranking
-  Regression Analyses
-  Diagram
-  Logout

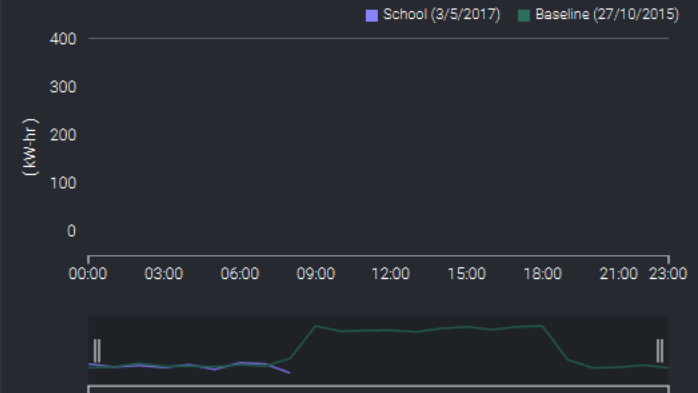
School Electricity - Benchmarking

Site - North



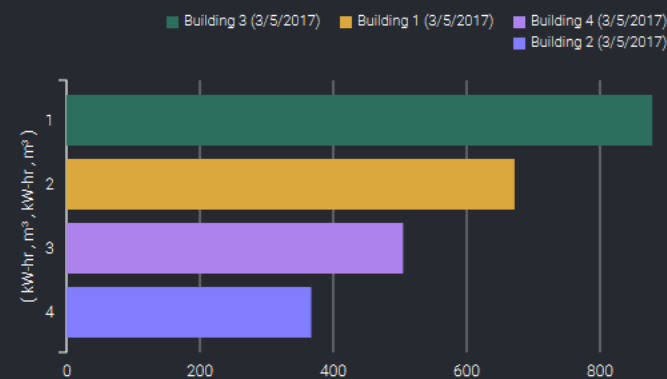
Main Supply

Site - North



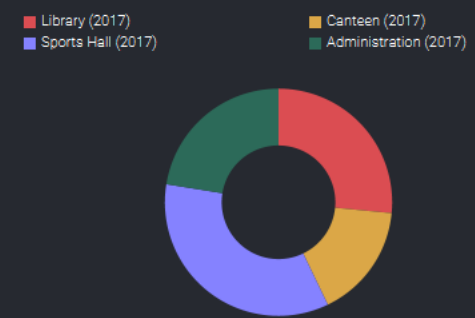
Energy - Ranking

Site - North



Energy - Distribution

Site - North



ARENA NX



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Homepage

School

Hotel

Time Program

Calendar

Trends

Alarms

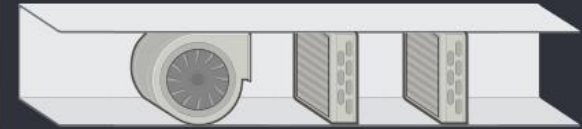
Database Query

Logout

Room control - Ground Floor - R101



Fan Coil



Outside Air Damper



Display Values

Room Temperature	24.5 °C
CO ²	775.1 ppm
Valve Heating	0.0 %
Valve Cooling	0.0 %
Outside Air Damper	0.0 %
Fan	OFF

Setpoints

Occupy Heat	24.5 °C	-	+
Un-Occupy Heat	19.5 °C	-	+
Occupy Cool	24.0 °C	-	+
Un-Occupy Cool	28.0 °C	-	+
CO ² Occupy	800.0 ppm	-	+
CO ² Un-Occupy	1800.0 ppm	-	+

Lighting

Lighting	ON
Bulb Fail	Defect
Accum. Runtime	27.4 hr
Turn Light On	
Turn Light Off	

Hotel Booking System

Occupy State	Occupy
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Setpoint - Effectiv

Temperatur	24.5 °C
CO ²	800.0 ppm

Blinds

Blinds	Up
Shutter Up	
Shutter Down	









ARENA NX

CENTRA^{LINE}
by Honeywell

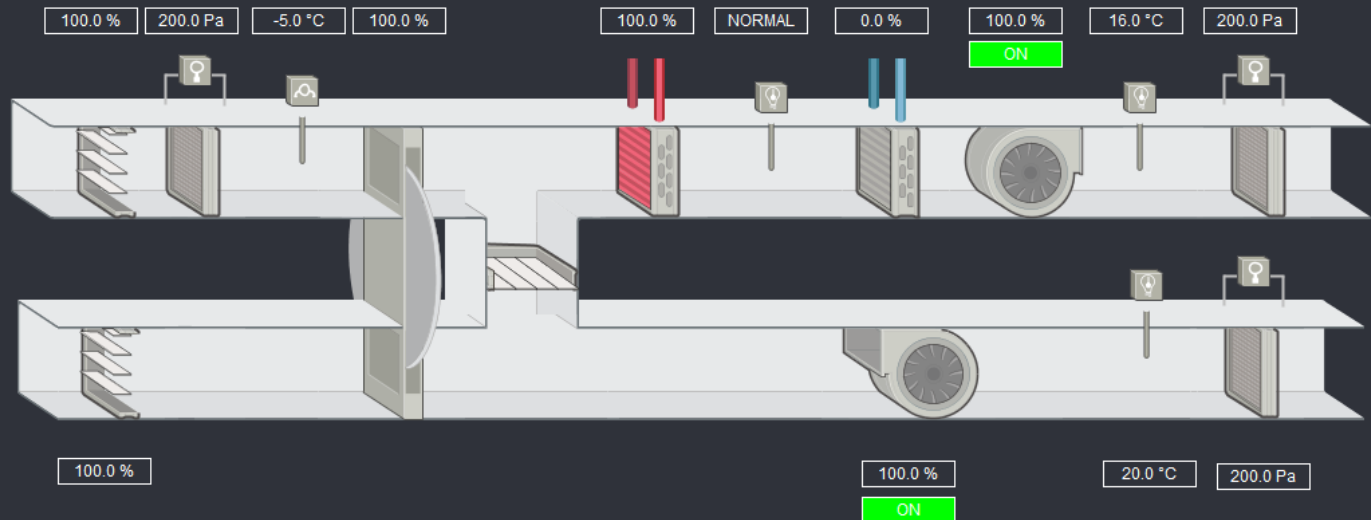
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-  Calendar
-  Trends
-  Alarms
-  Database Query

RLT Grafic 3d



Plant Switch

Manual ON


Manual OFF

Automatic

Simulation Frost

Frost Active

Frost OK

 Logout



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Intrebari si raspunsuri

Mulumesc pentru atentie!