



# Smart Connected Communities

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# What is driving the Smart City?



Urbanization



Sustainability: reducing emissions & consumption



Resiliency amidst the impacts of climate change



Efficiency in a time of funding cuts



Economic development



Proliferation of IoT and connected devices





# Smart Technologies: Enabling Government to be More Efficient & Create a Thriving Brand



Preserving resources  
through your parks



Optimizing refuse  
processes



Transit/traffic driving  
economic prosperity?





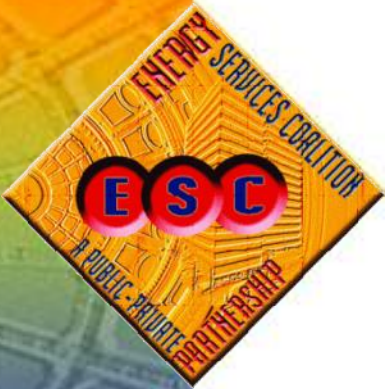
# Innovative Cities: Using Data & Tech to Improve Competitiveness & Livability



Are you monetizing your vertical assets?



# Securing Connected Cities: Smarter Policing & Surveillance through Technology & Data



Deter/prevent  
crime



Data management  
personnel



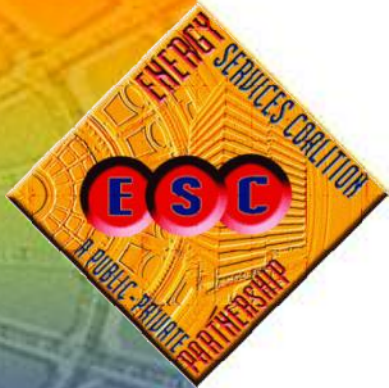
Public safety  
resources alignment



Web-based  
services



# Smart Meters and Network: “Sensing the World”



Concerned about  
water resources?



Attracting businesses  
& millennials?



Affordability holding  
your city back?



# End Game: Better Decision Making & Improved Quality of Life for all Residents



  
Smart  
Parking

  
Your Plan  
of Action

  
Physical  
Infrastructure

  
Community  
Focus

  
Your Brand  
Matters

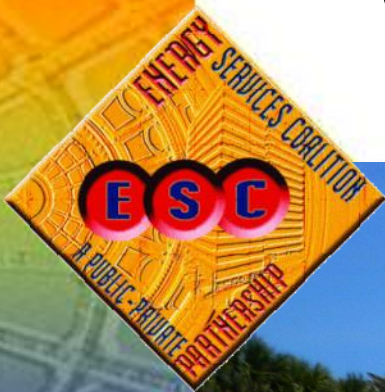






# City of Jacksonville Beach, FL

## Smart Utilities Upgrade Program



### UPGRADES

- 10,500 Intelligent Water Meters
- 150 Intelligent Natural Gas Meters
- Area-Wide Automated Metering Infrastructure
- Infrastructure and Safety Modernization Program
- Mobile Leak Detection System

### PROJECT VALUE

\$6.5 million

### ANNUAL SAVINGS

~\$500,000

### PAYBACK

14 Years

# City of Evansville, IN City-Wide Modernization



## UPGRADES

- Lighting, HVAC, Controls
- Valve Automation
- Methane biogas systems
- Automated Meter Infrastructure (AMI)

## PROJECT VALUE

\$39 million

## ANNUAL SAVINGS

\$3.1 million

## PAYBACK

20 Years

# City of El Paso, TX

## Street Lighting Program



### UPGRADES

- 18,800 new LED street lights
- Wireless ROAM street light control system
- GPS street light inventory software
- 6,600 new LED traffic signals
- 6 Major Phases of Work, City-Wide

### PROJECT VALUE

\$42 million

### ANNUAL SAVINGS

\$19.4 million

### PAYBACK

10-20 Years



# Johnson Controls Hall of Fame Village



Creating the first sports  
and entertainment  
“smart city”



# Johnson Controls Hall of Fame Village



2015

2016

2017

2018

2019

2020



# Johnson Controls Hall of Fame Village



**CONTROLS**



**HVAC EQUIPMENT**



**SECURITY**



**FIRE & HAZARD  
PROTECTION**



**BUILDING SERVICES  
& PARTS**



**LIGHTING, CONTROL  
& RETROFIT**



**OPERATIONAL  
INTELLIGENCE &  
LOSS PREVENTION**



**ENERGY STORAGE**



**RETAIL SYSTEMS**

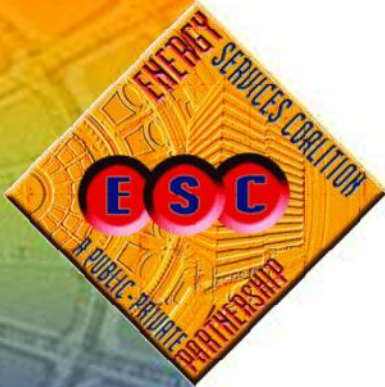


**SPECIALTY SERVICES –  
WIRELESS, AUDIO /  
VISUAL, DATA**



**BUILDING WIDE  
SYSTEMS INTEGRATION**

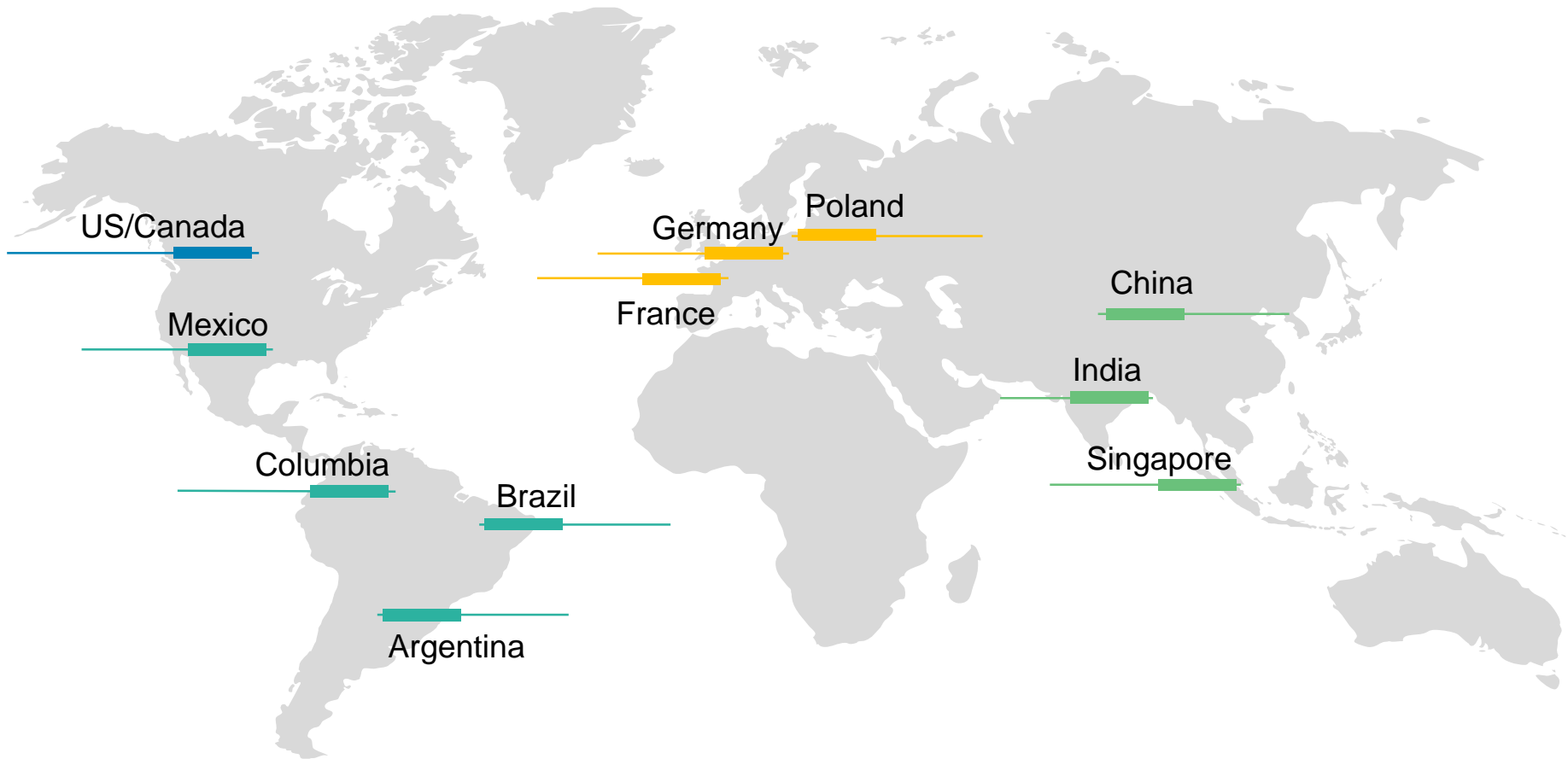
# Life is better in a smart city



It's safer, greener, less congested, cleaner, and more cost- and energy-efficient. From the streets to municipal services, it is easier to navigate.

It's about collecting and acting upon the data that is available from an ever-increasing number of sources—sensors in roads, mobile phones, commercial transactions, census and other public records, even personal fitness trackers.”

Navigant Research, 2017



## 2017 Energy Efficiency Indicator Survey

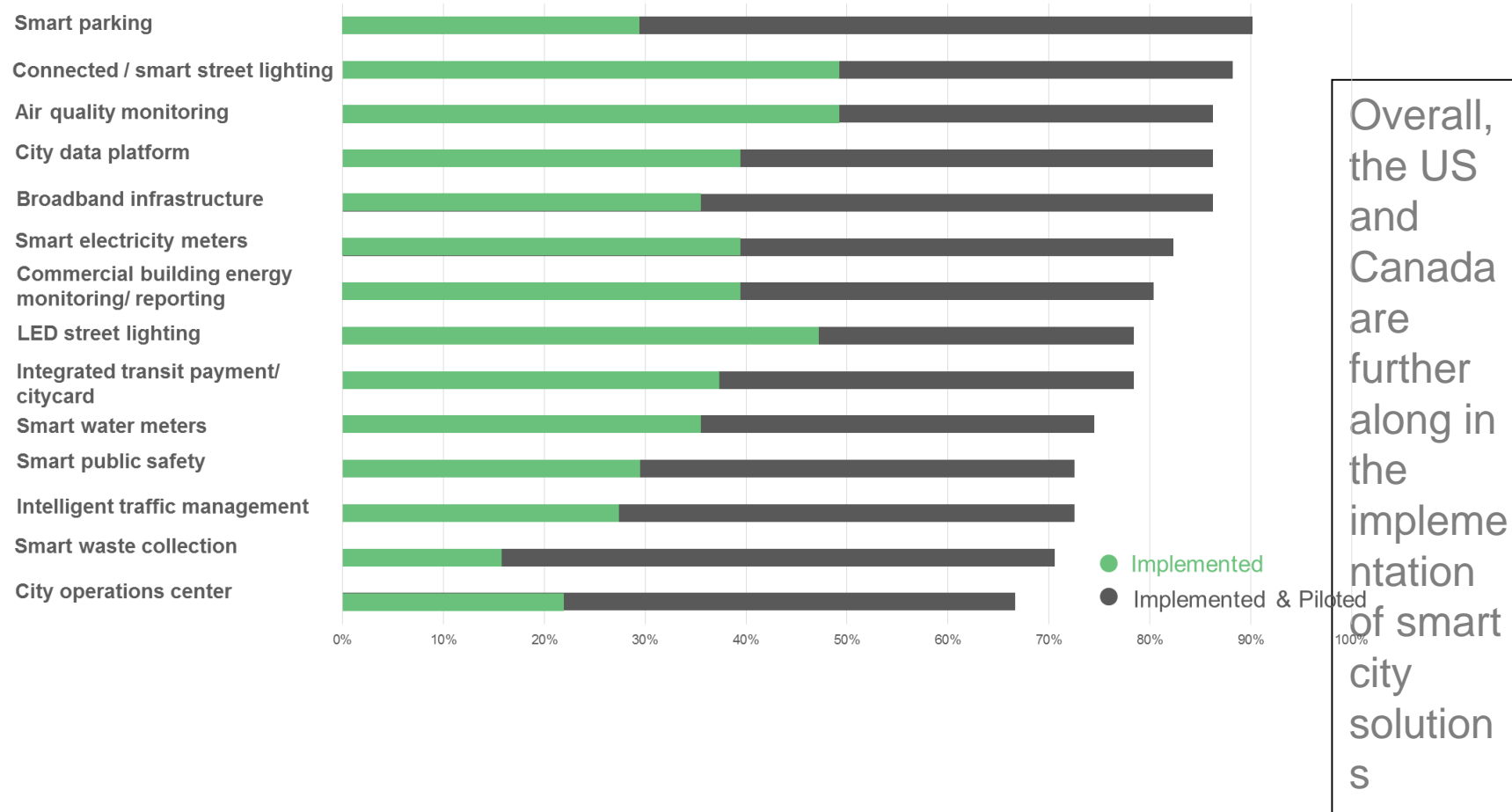
1,537 energy and facility management executives from twelve countries



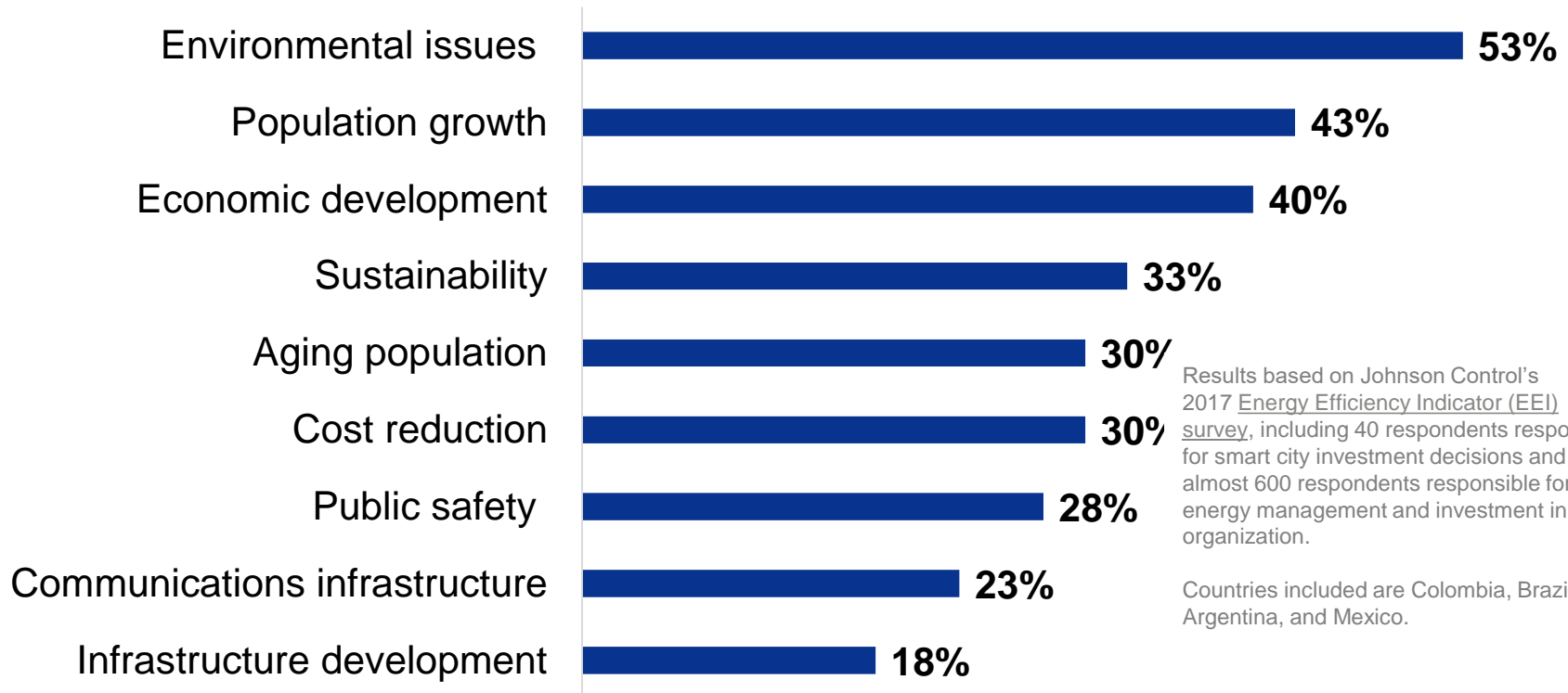


# In the US and Canada, smart parking and smart street lighting are the most implemented solutions

## US & Canada



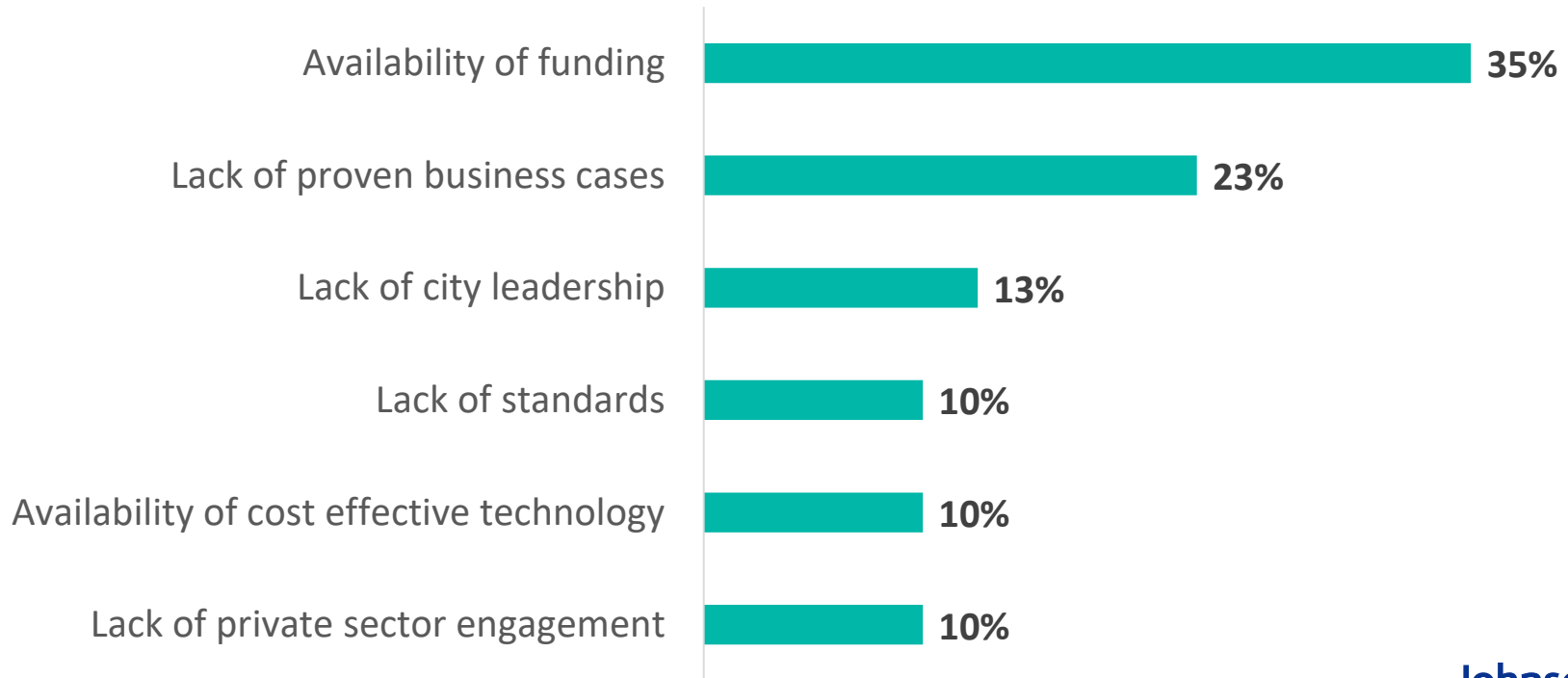
# DRIVERS OF SMART CITY INVESTMENTS



Results based on Johnson Control's 2017 [Energy Efficiency Indicator \(EEI\) survey](#), including 40 respondents responsible for smart city investment decisions and almost 600 respondents responsible for energy management and investment in their organization.

Countries included are Colombia, Brazil, Argentina, and Mexico.

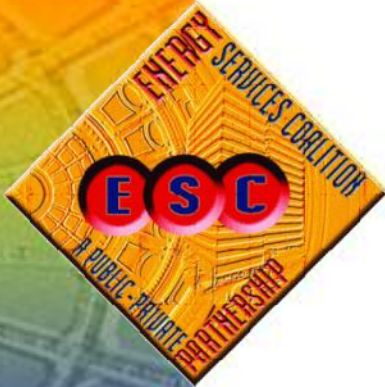
# BARRIERS TO SMART CITY INVESTMENTS



Results based on Johnson Control's 2017 [Energy Efficiency Indicator \(EEI\) survey](#), including 40 respondents responsible for smart city investment decisions and almost 600 respondents responsible for energy management and investment in their organization. Countries included are Colombia, Brazil, Argentina, and Mexico.



# Thank You



Smart Energy

- + Smart Buildings
- + Smart Infrastructure
- + Smart Transportation

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Urban Efficiency

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