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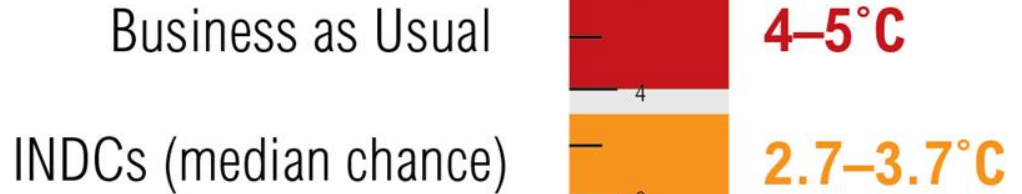
TOWARDS A NEW SUSTAINABLE MOBILITY

Holger Dalkmann

PHOTO CREDIT: BENOÎT COLIN/WRI

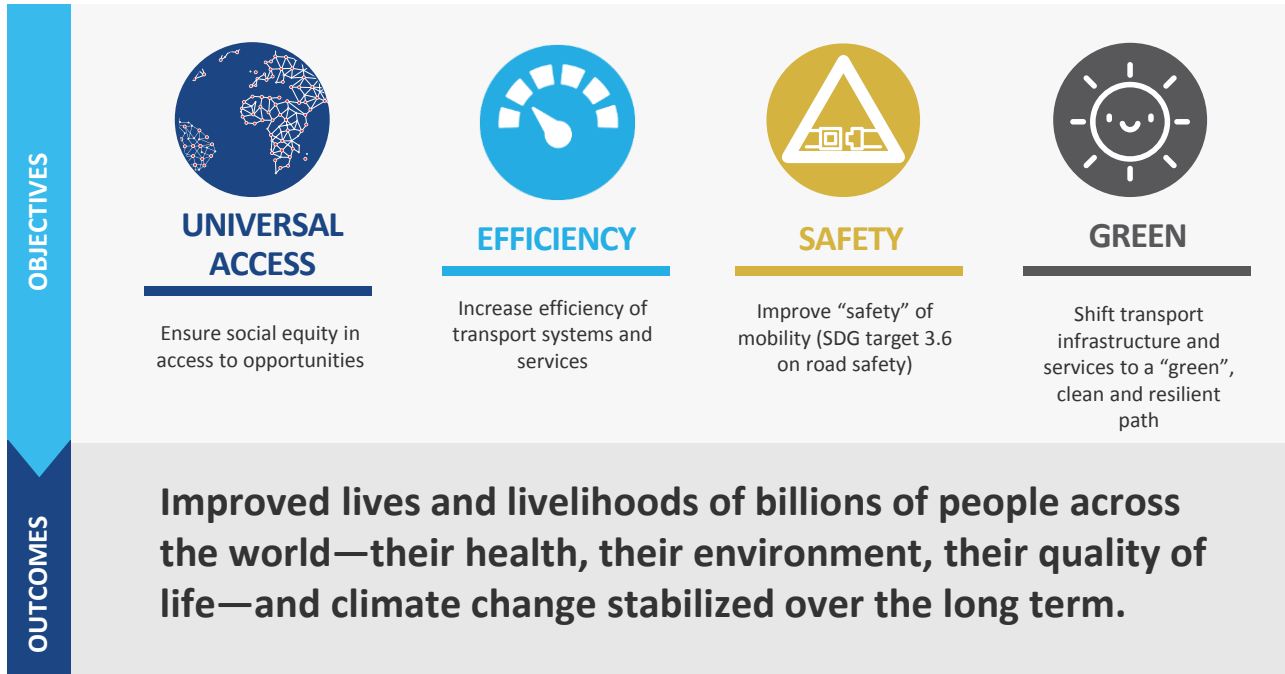
NEED FOR ACTION ON CLIMATE

Estimated increase in global average temperature above pre-industrial levels (in degrees C) by 2100



VISION

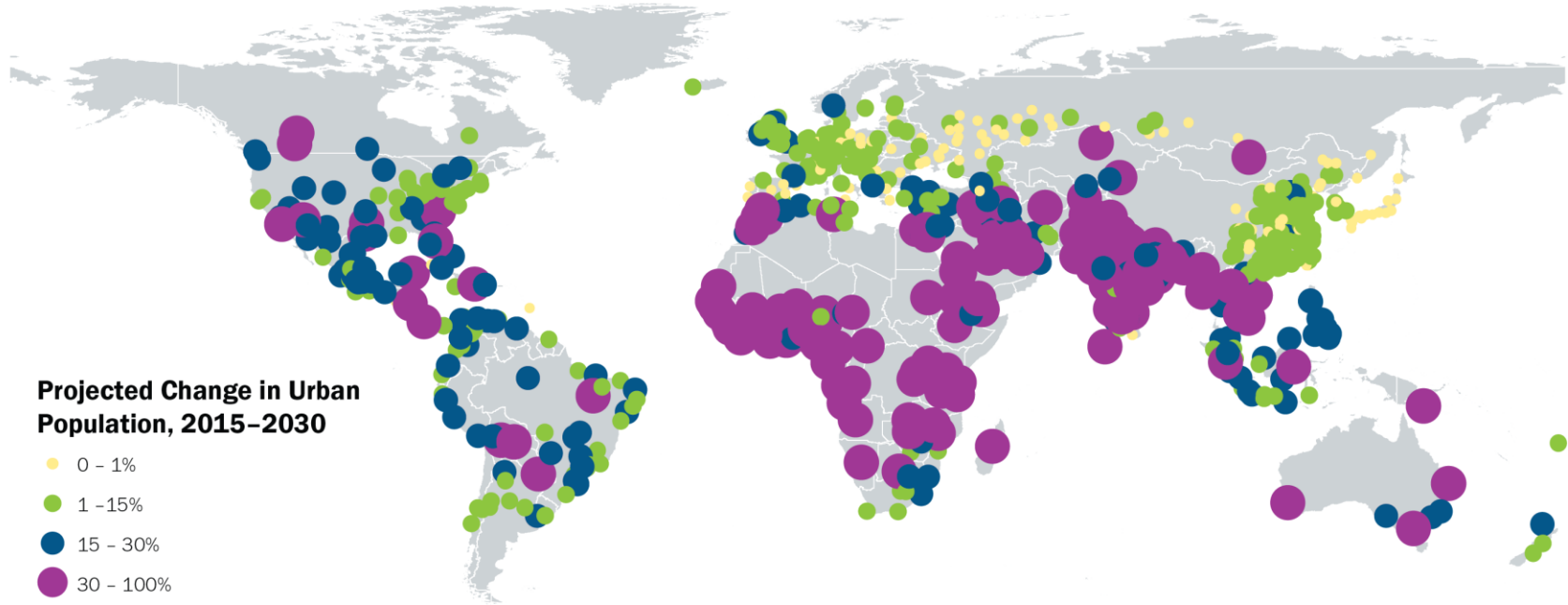
To facilitate **Sustainable Mobility for All** through four objectives:



TRANSPORT IN THE SUSTAINABLE DEVELOPMENT GOALS

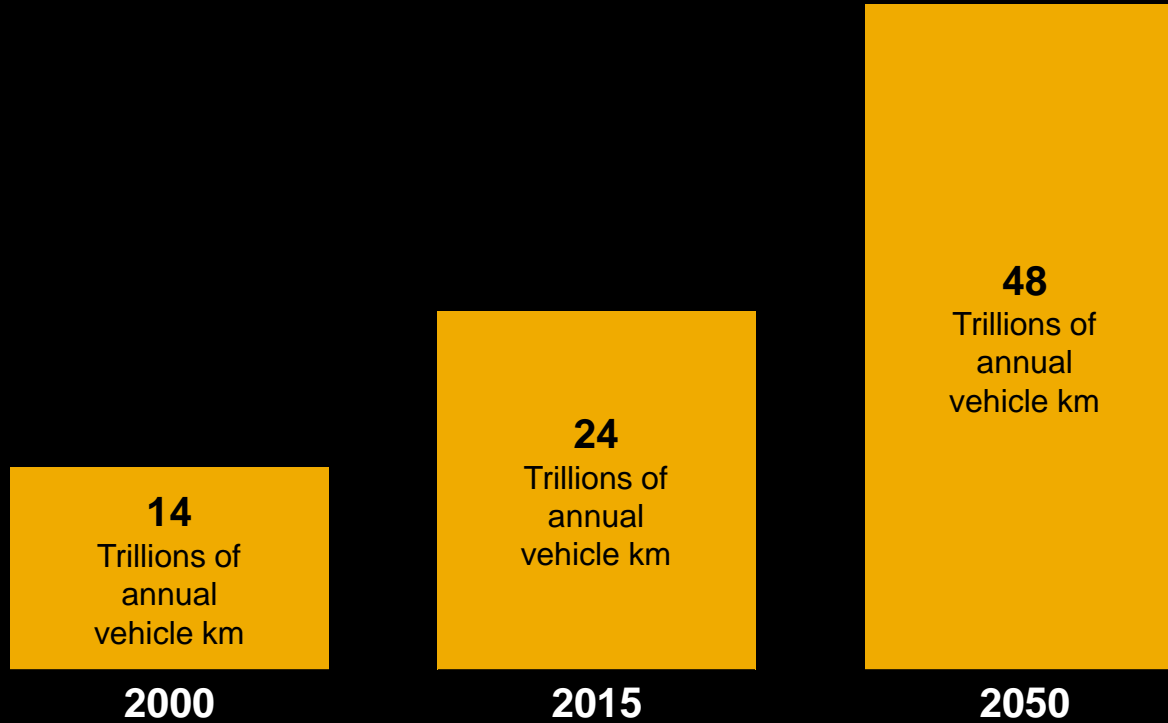


ASIA AND AFRICA WILL HAVE RAPID GROWTH

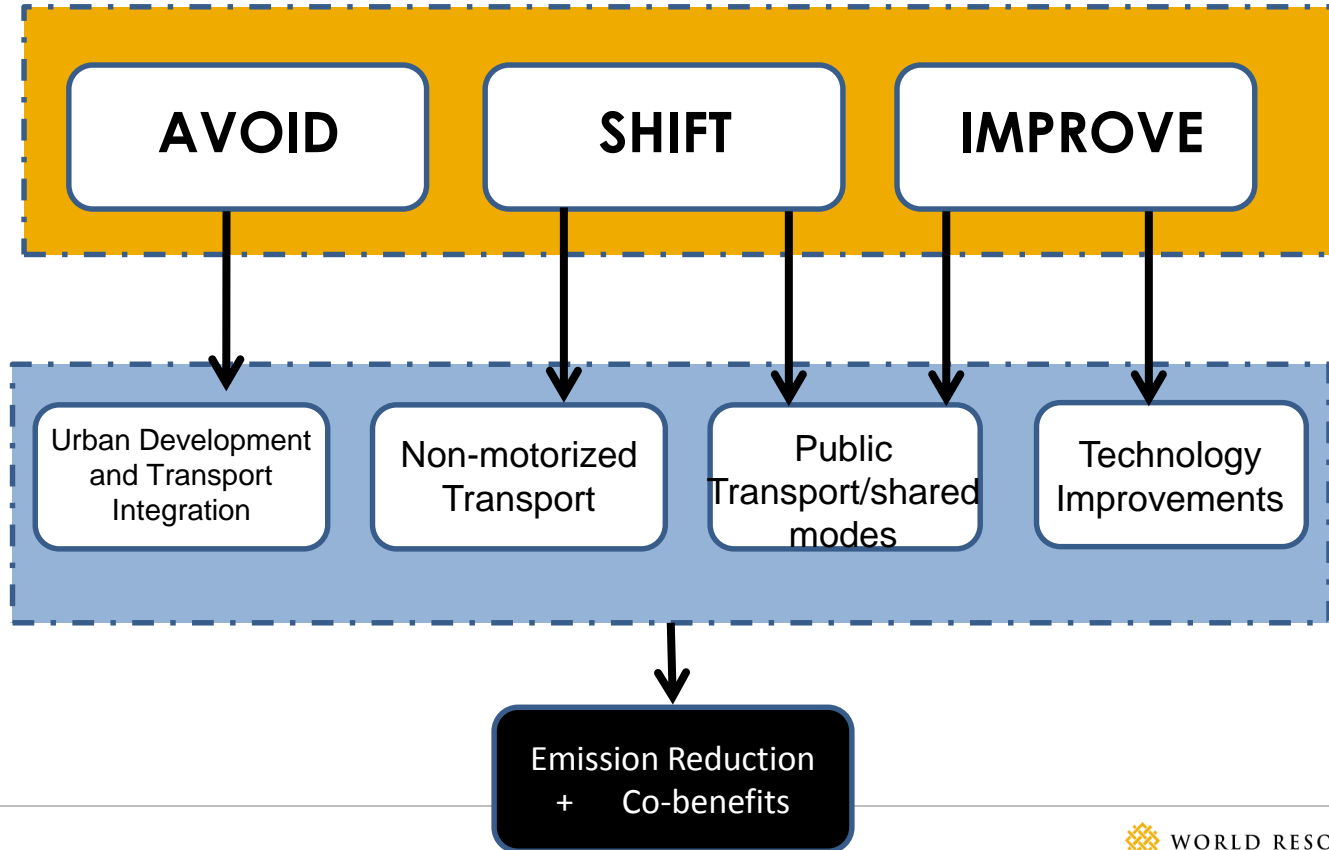


In the next 20 years, **300 million people** will be added to cities in China and India alone

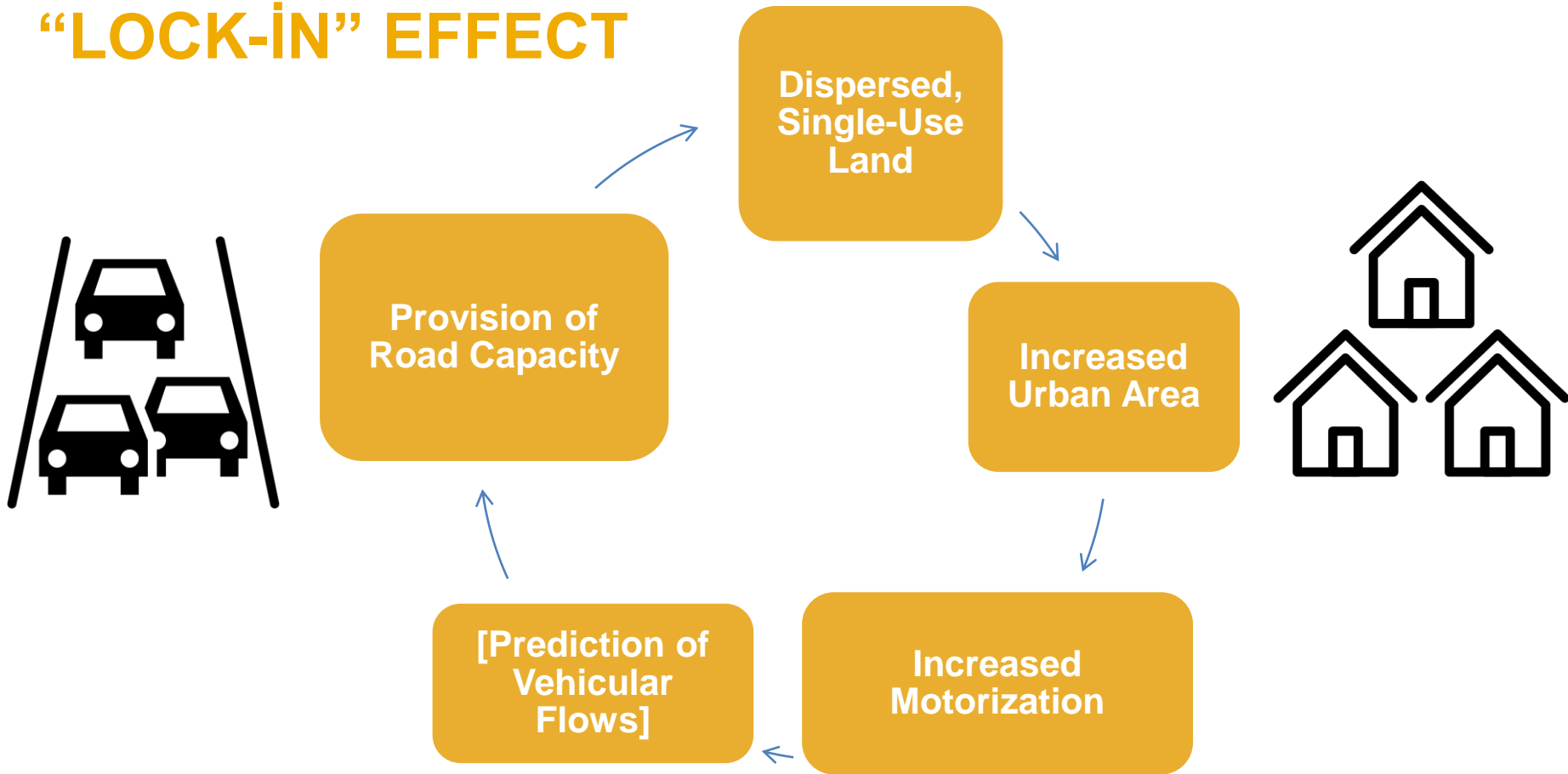
RISE IN MOTOR VEHICLE USE



AVOID-SHIFT-IMPROVE (ASI) APPROACH IS NEEDED



“LOCK-IN” EFFECT



OUR VISION FOR SUSTAINABLE CITIES



CONNECTED



COMPACT



COORDINATED

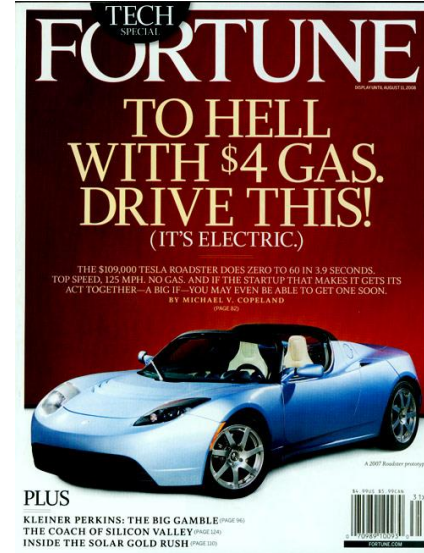
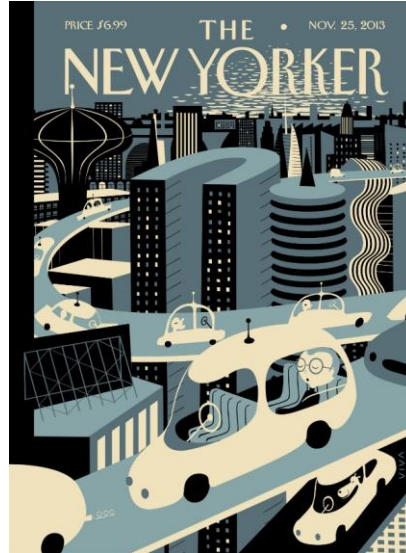
Avoiding the lock-in effect of unsustainable urban development



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NEW MOBILITY AS DISRUPTIVE SOLUTION

MEDIA ATTENTION...



Date	Partnership	Details
Jan 2016	GM – Lyft	\$500 million invested into Lyft
Mar 2016	GM – Cruise Automation	GM buys self driving tech for \$1 billion
May 2016	Toyota – Uber	Toyota bought a stake in Uber
May 2016	Apple – Didi Chuxing	Apple invests \$1 billion in Didi
May 2016	BMW- Scoop	BMW invests undisclosed amount in Scoop
May 2016	Google – Fiat Chrysler	Google to use Fiat cars to run self driving tech
May 2016	Volkswagen - Gett	Volkswagen to invest \$300 million in Gett
Jun 2016	BMW – Intel – Mobileye	Launch autonomous rideshare company in 5 years
Aug 2016	Ford – ZoomCar	Ford Invests \$24 million
Sep 2016	Ola – Mahindra	Mahindra-Ola package for Ola drivers
Sep 2016	Ford – Chariot	Ford buys Chariot in all cash deal

CHINA: COUNTRY OF NEW MOBILITY

- DIDI: 400 MILLION USERS IN 400 CITIES
- VALUE OF US\$40-60 BILLION (MORE THAN UBER)



 **滴滴出行**
滴滴一下 美好出行
滴滴打车 全新品牌升级

WHAT IS NEW MOBILITY?

Models using **technology** to deliver **transport** in new ways

Reinventing
ownership
and delivery

Using data
and
connectivity
in new ways

Developing
new
technologies

SIGNIFICANT PRIVATE SECTOR ACTIVITY

COMMUTER EXPERIENCE



SHARED MOBILITY

E.g. Bike-sharing, car-sharing, ride-sharing



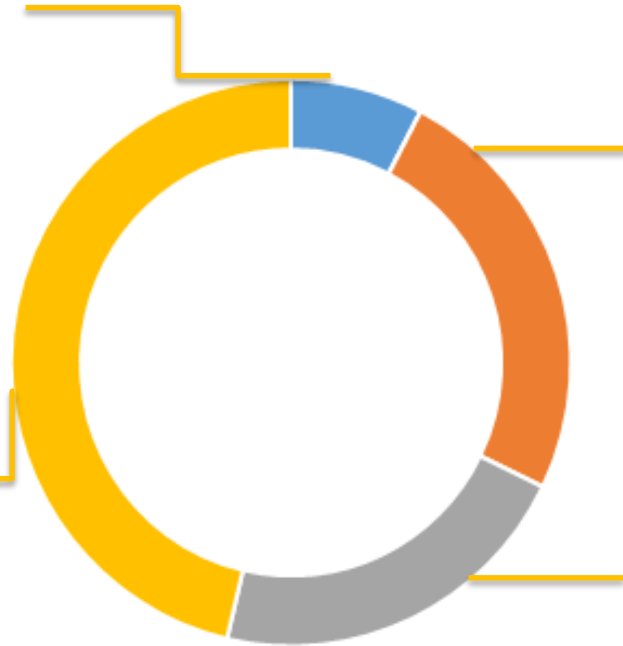
DATA DRIVEN DECISION MAKING

E.g. Traffic flow sensors, auto-routing software, on-demand shuttles



PRODUCT INNOVATION

E.g. Autonomous vehicles, Electric vehicles



THE KEY QUESTION

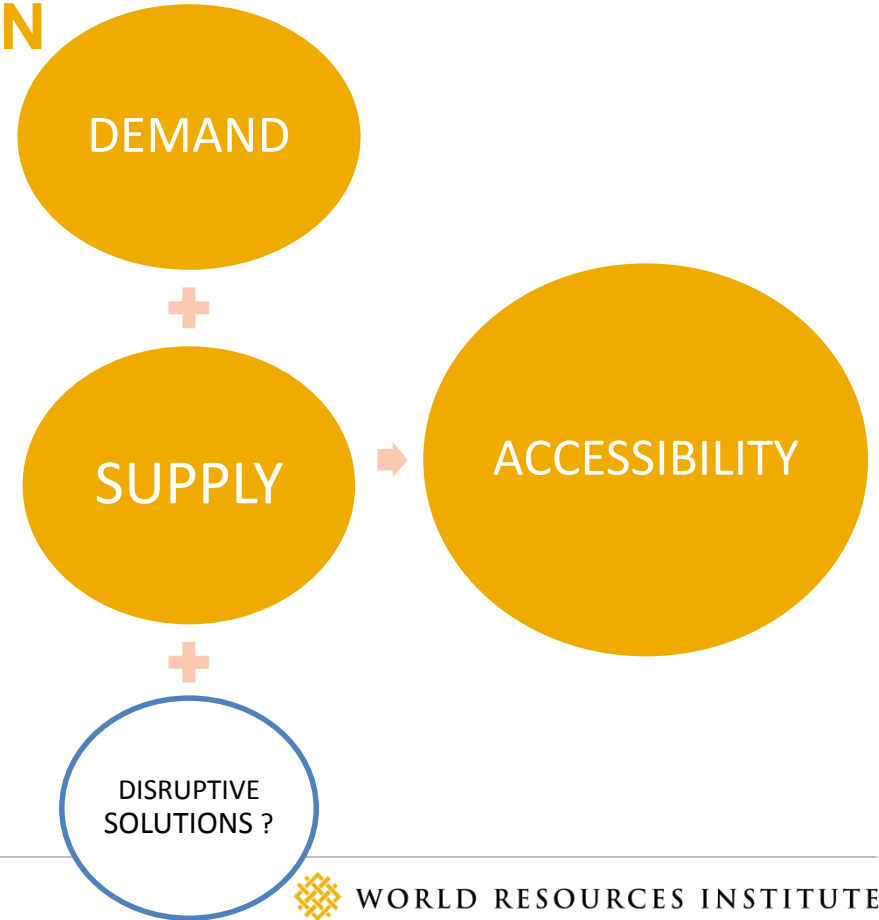
NEW &
"SEXY"



SUSTAINABLE

TOWARDS A SUSTAINABLE LOW CARBON FUTURE: INTEGRATION & DISRUPTION

- New players
- New opportunities
- New narrative



TOWARDS A NEW SUSTAINABLE MOBILITY

New Sustainable Mobility (NSM) uses information and communication technologies to enable more equitable access to urban opportunities while reducing emissions, injuries and fatalities and improving urban efficiency.



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SIX ACTIONS TOWARDS A NSM

1. SYSTEM INTEGRATION

- Create seamless mobility
- Avoid competition with mass transit
- Serve as last mile solution
- Enable better access for all

2. THE NEED FOR A SUSTAINABLE FINANCE MODEL

City

- - Leverage new services through charging of fee/licence
- - Reduce subsidies for low demand services

Business

- - Long term risk of dependence of venture capital
- - Need to find a profitable business solution (automation?)

3. OPEN DATA

- Enable access to data for
 - Better planning
 - Better management
 - Enable charging
 - Measure impact

4. ENABLE IMPACT ASSESSMENT AND MONITORING

Equity

Emissions

Safe access

Congestion

5. POLICY AND REGULATION

- Enable market solutions, but make them work for the city
- Strengthen governmental knowledge and purchasing power

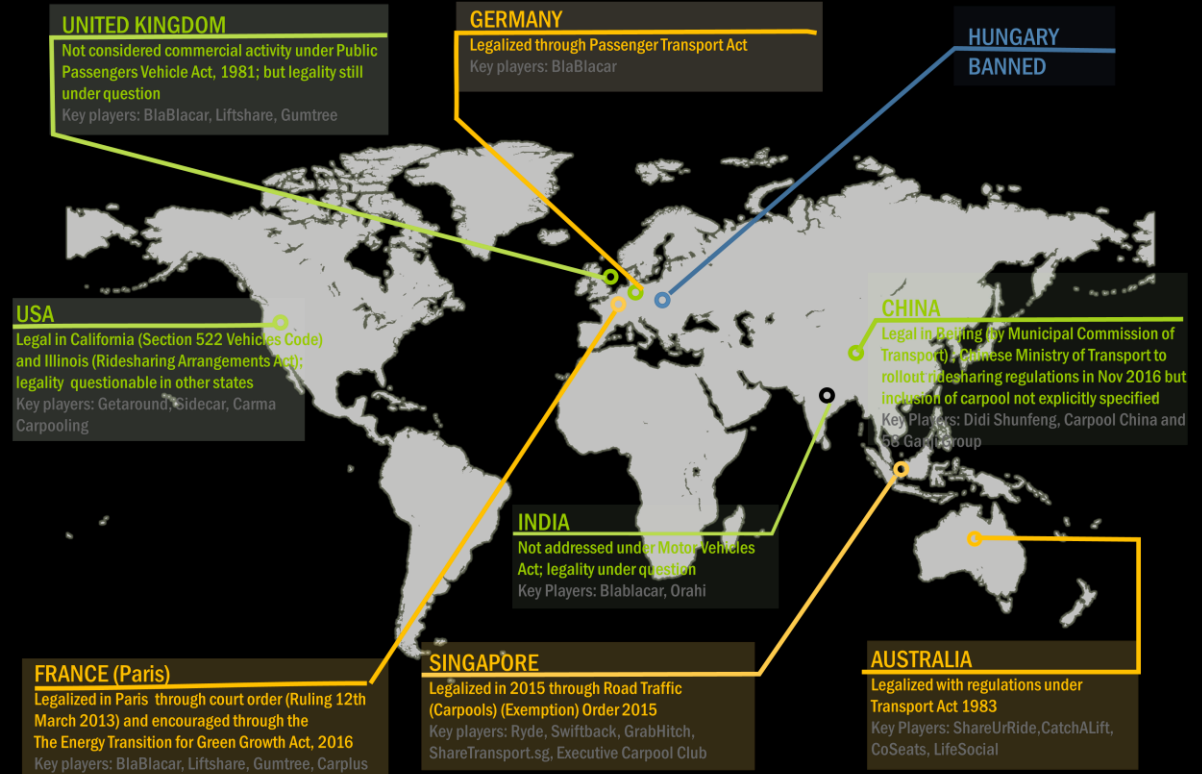
UNCERTAINTY ON REGULATION – E.G. CAR POOLING

KEY: STATUS OF GLOBAL CARPOOL REGULATIONS

Carpooling models are legalized

Carpooling models legality in question

Carpooling businesses are illegal



6. INNOVATION BEYOND PASSENGER VEHICLES

Bike-share – new systems like Mo-bike
Minibuses on demand
New solutions for urban freight....

THE WAY FORWARD

Get cities back in the driver seat – tell the technology provider what to do for you before they do it to you

THANK YOU

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