



Façade Refurbishments for Safety - The Developers' View

Safety Design in Buildings Conference
- Abu Dhabi 2019

Andy Dean FCIQB, FSFE
Head of Façades



The Presenter

Andy Dean
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Andy has over 30 years of experience in the field of Building and Construction, ranging from structural testing within the nuclear industry to fire testing. Having established the Dubai Facade Technology Centre and Laboratory in 1997, and operated it for 10 years, he has particular knowledge of the design and weathertightness testing of facades, curtain walling and building envelope systems; and business life in the Middle East.

He has carried out many consultancy projects as a third-party specialist in the field of building envelope technology and combines that with his fire industry experience to deliver added value.

Over the last 5 years he has had a strong focus on the refurbishment and technical performance enhancement of façades on several major buildings in the region, as they have come to the end of their first life cycle.

Andy is a Fellow of the Chartered Institute of Building, Fellow of the Society of Façade Engineers (CIBSE) and member of the Glass and Glazing Federation; holding or having held senior committee positions in the local chapters of these organisations.

As a façade consultant he continues to provide input into the GCC codes and is a regular speaker at industry technical seminars across the region.

SAFETY
DESIGN
IN
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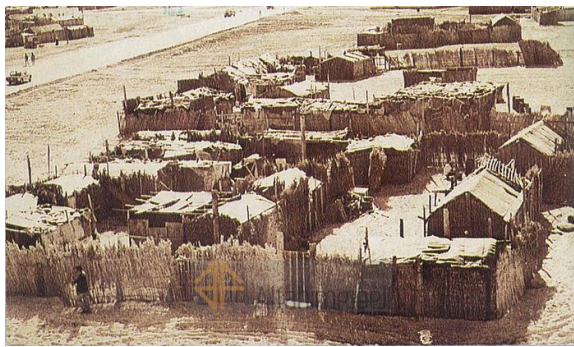
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Learning Objectives / Agenda



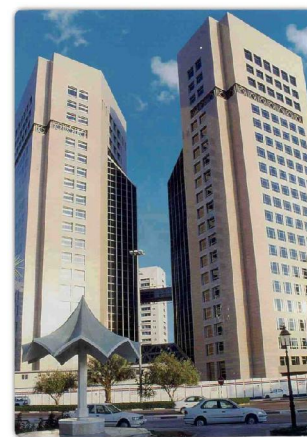
- Context - façade refurb
- Sectors
- Factors
- Opinions
- Conclusions

Context - Arabian Peninsula - Older History



Sources: Wikipedia, Architect Middle East, Green Prophet, Scribol, Abudhabihistory.com, Tes, Amazing Oman

Context - Arabian Peninsula - Recent History



Sources: The National, Pinterest, Glinka, Trip Advisor, Kingdom Centre, Property Finder, Wikipedia, Alumaco, Ardalan Associates

FACADES AND FIRE

The Essential Elements

**Andy Dean BSc (Hons),
MCIQB, FSFE**
Head of Façade Engineering
WSP Middle East

Manama, Bahrain, Jun 2014

Safety Design in Buildings



Bahrain Conference

Intercontinental Hotel Thursday, June 19, 2014



Fires in the UAE



Sources: Emirates 24/7, The National, Khaleej Times, Gulf News, Irish Mirror, Lovin Dubai, You Tube,

JANUARY 2016

Guidance on Façades and Fires

Clarifications and Audits

Andy Dean

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WSP | Parsons Brinckerhoff



Safety & Security Design in Buildings

Intersec Conference



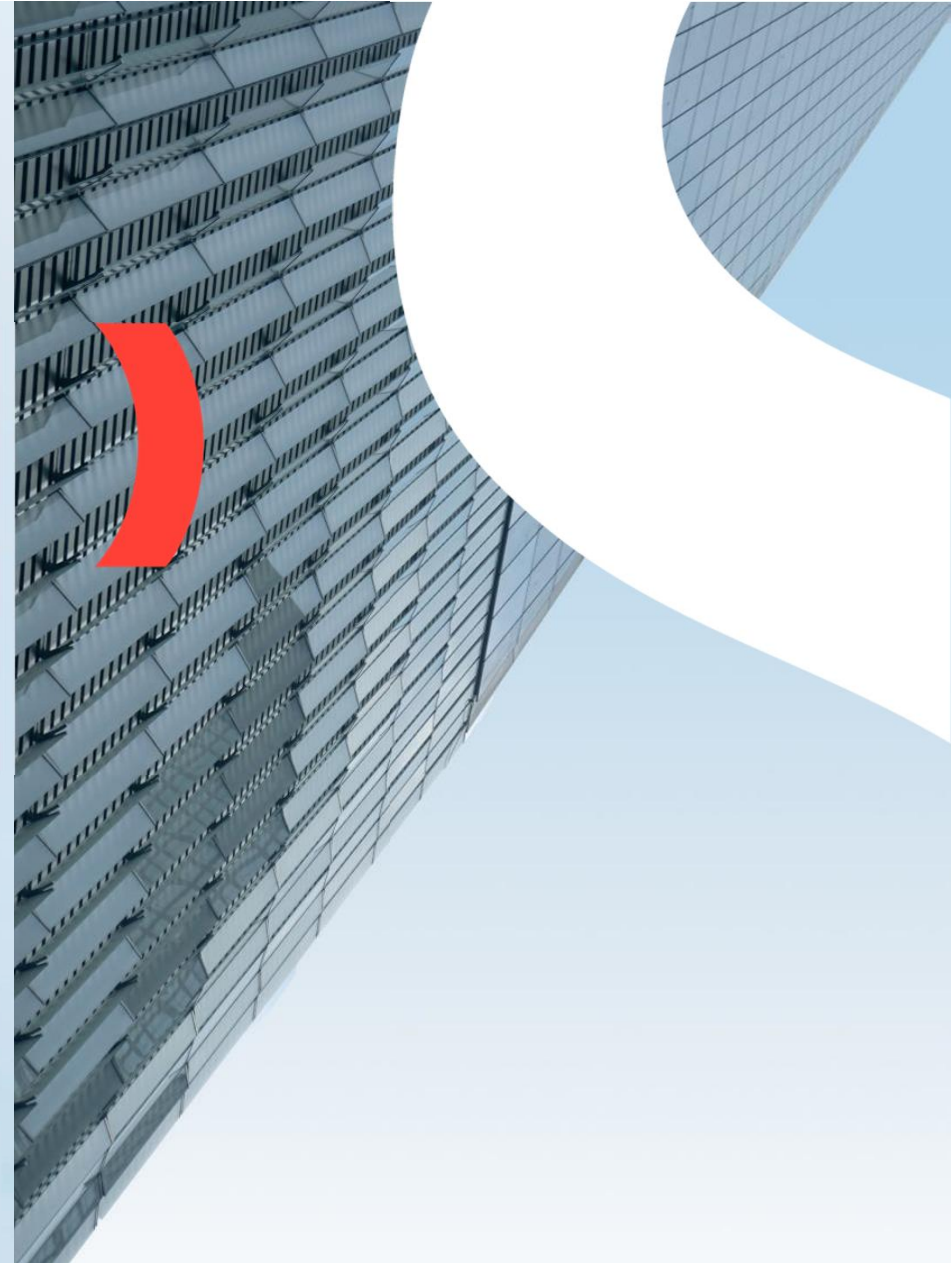
Dubai Convention Centre Trade Centre 2, Sunday, January 17, 2016





**Façade Refurbishment Strategy for
Fire Performance**
Last Longer Conference
– UAE February 2019

Andy Dean FCIQB, FSFE
Head of Façades



Presentations About...

- ... Fire and Facades
- ... Guidance on audit and review strategies
- ... Refurb strategies
- ... Code and safety of facades

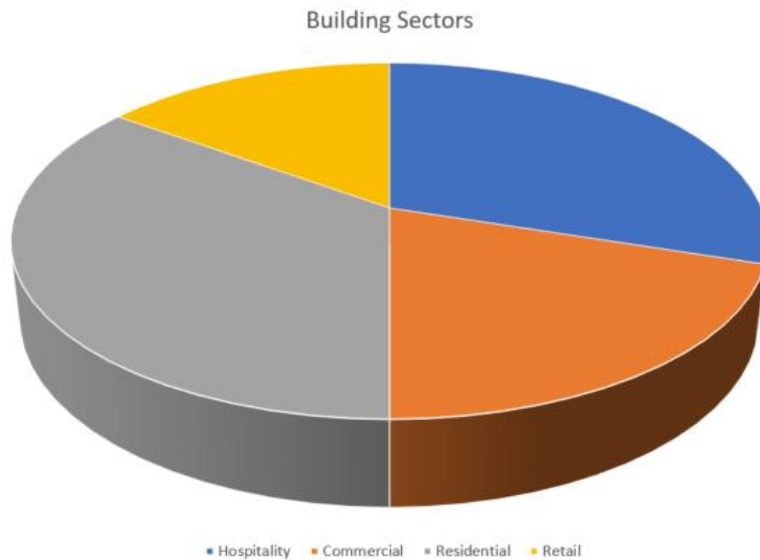
81 since
2014

Reality Now - Q4 of 2019



- Thousands of non-compliant buildings
- Hundreds of buildings reviewed
- Relatively few buildings refurbished
- Even fire damaged buildings only partially refurbished
- **Why?**
- **Ask the opinions of:**
 - developers
 - owners
 - operators
 - associations

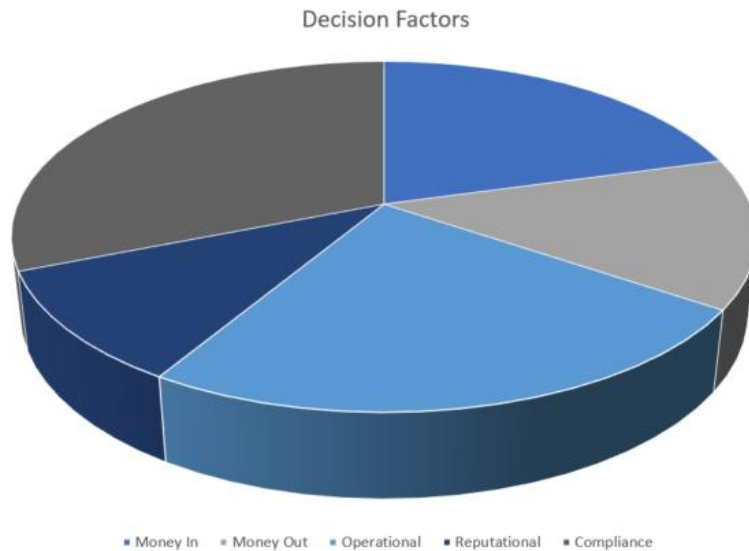
Sectors Interviewed



- Hospitality
- Retail
- Residential
- Commercial

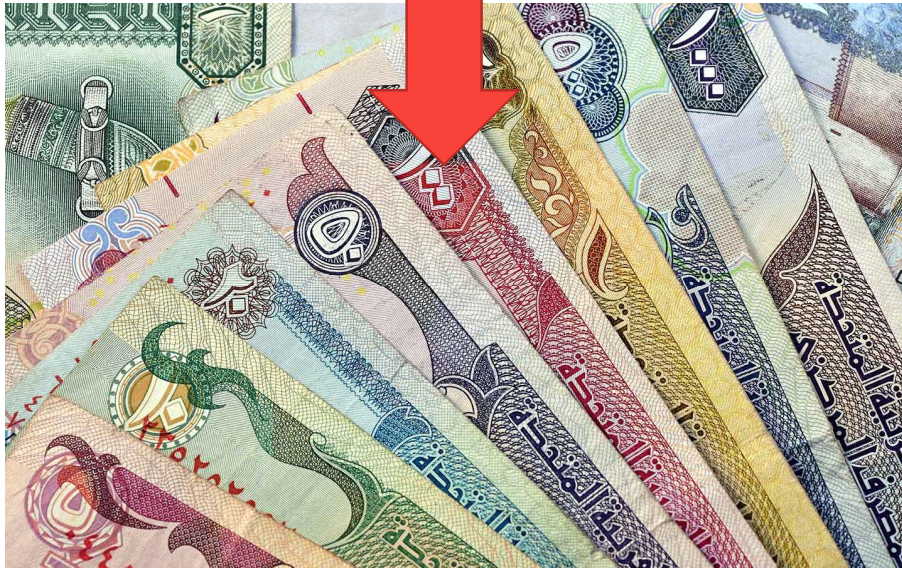
— Not a survey - a relatively few interviews with senior players

Factors Emerging



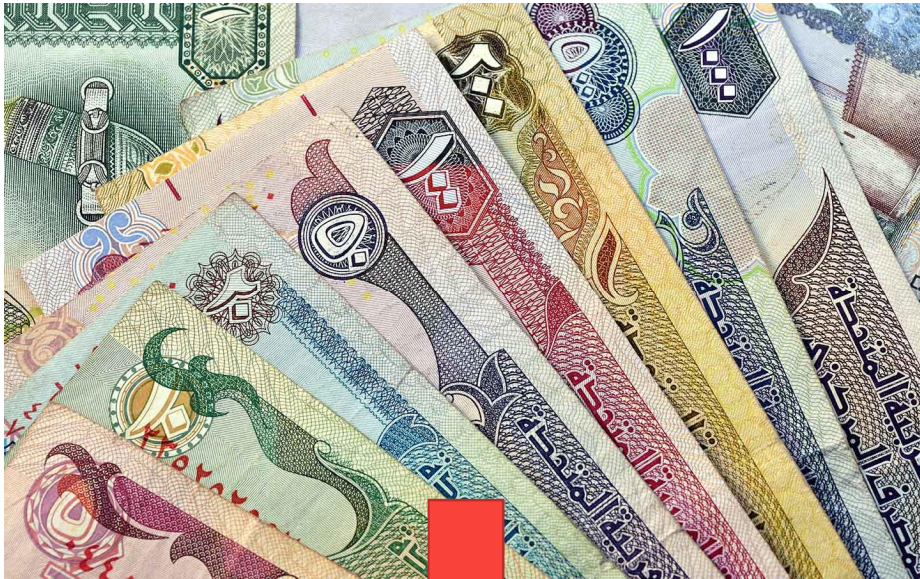
- Commercial / Revenue (Money In)
 - Financial (Money Out)
 - Operational
 - Reputational
 - Compliance
-
- Context - not everyone has reviewed their property for safety

Is Commercial / Revenue (Money In) a Factor?



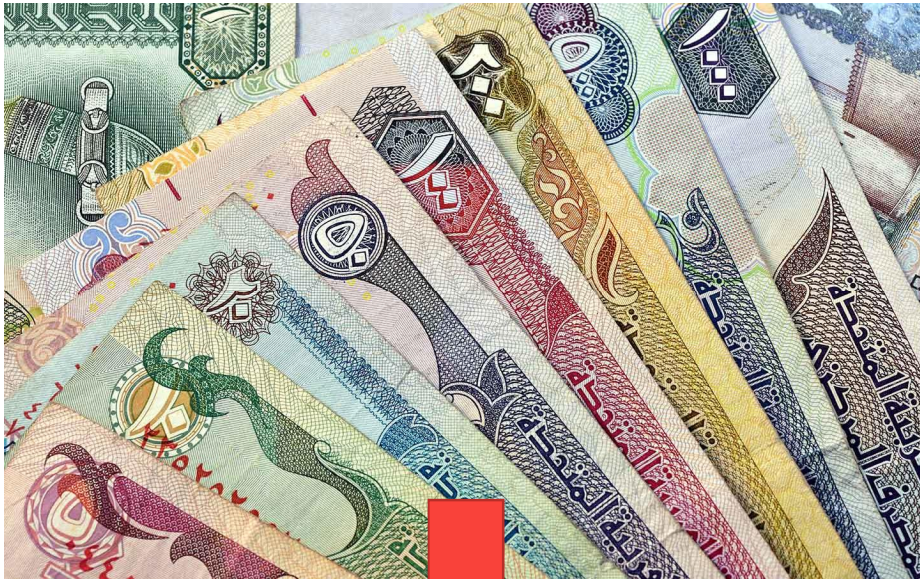
- **Hospitality** ù
 - tour operators ask for safety report
- **Retail** û
 - façade doesn't create revenue
 - branded façades and advertising spaces do
- **Residential** û
 - low impact on revenue
 - few people ask
- **Commercial** û
 - some tenants ask
 - who and how big are the tenants?

Is Financial (Money Out) a Factor?



- **Hospitality** û
 - rising insurance costs
 - regular upgrades
- **Retail** û
 - no insurance pressure
- **Residential** üü
 - some insurance pressure
 - low rent is most important
- **Commercial** û
 - again tenant driven

Is Financial (Money Out) a Factor?



- **Insurance**
- Rising insurance costs
- Not high enough yet
- tipping point not yet reached
- Why insure anyway?
- With a portfolio,
pressure can be put on
the insurer and cost can
be spread

Are Operational Issues a Factor?



- **Hospitality** û
- small adjustments made - some changes
- **Retail** û
- huge operational presence
- **Residential** û
- relatively helpless
- **Commercial** û
- on-site team - minimal cost - limited in effect - possibility for fire drills

Are Reputational Issues a Factor?



- **Hospitality** ü
- high potential for pressure
- **Retail** û
- Brand value is high, but considered a low risk
- **Residential** üû
- high 'apparent' pressure
- ignore the risk
- owners aren't occupiers
- **Commercial** û
- reactive
- action of change may cause more damage

Is Risk and Compliance a Factor?



- **Hospitality** ü
- pressure, but working with the regulator
- **Retail** û
- risk perception very low
- **Residential** üü
- high concern: low appetite
- **Commercial** û
- high risk tolerance
- only if changes in regulation

What are the Perceived Drivers of Action?

Action Plan

ü Who

ü What

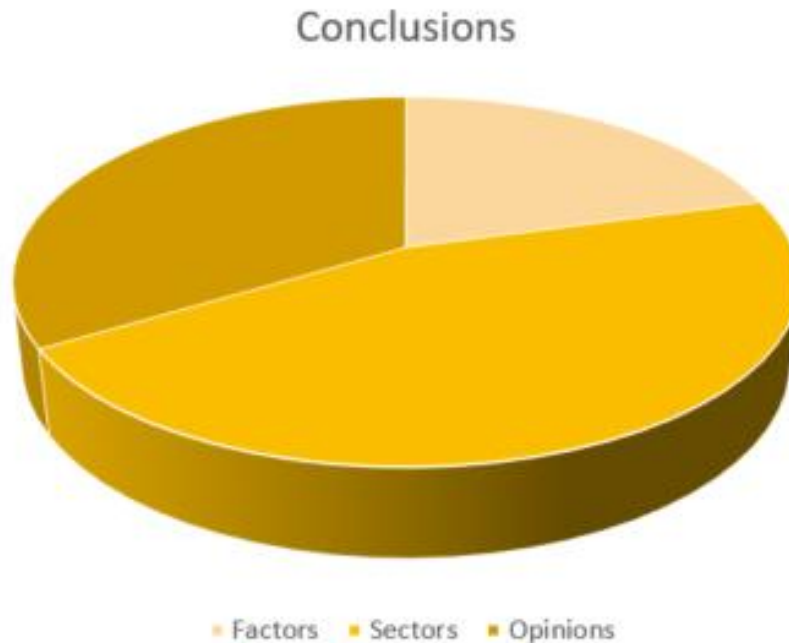
ü When

ü How

o ... tell me again, why?

- **Hospitality**
 - pressure from market
 - decision at board level
- **Retail**
 - no plans
- **Residential**
 - would like to
 - can we afford to?
 - practical obstacles
- **Commercial**
 - only if forced to

My Conclusions



- Texture of drivers in different sectors
- Some sectors feel more pressure than others - hospitality / resi
- Main driver is commercial
- Transient occupants
- Owners not occupiers
- Regulation needs to play a stronger hand if change is to happen

Thank you!

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