

بتمويل من الاتحاد الأوروبي







Accelerating 0-emission building sector ambitions in the MENA region

### **Towards Net-Zero Communities**

Venue: The Small Ville Hotel – 2<sup>nd</sup> of March 2023 Presented by Dr. Eng. Riad Assaf



### GREEN BUILDING Net-Zero Community











# GREEN BUILDING Net-Zero Energy Community





# GREEN BUILDING Net-Zero Carbon Community



Source: AZO Cleantech

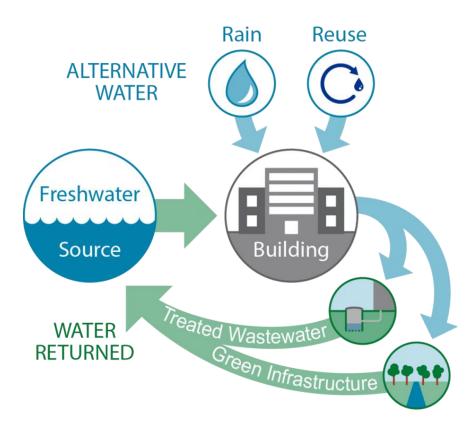


### GREEN BUILDING Net-Zero Waste Community



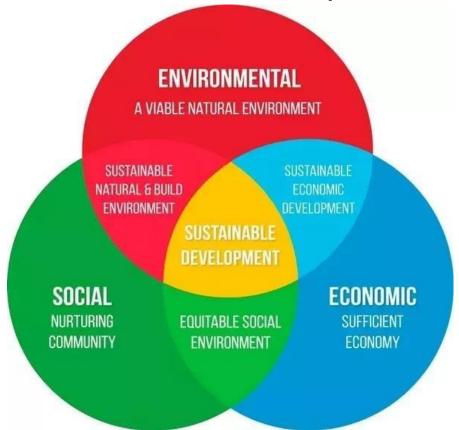


### GREEN BUILDING Net-Zero Water Community





### GREEN BUILDING SUSTAINABLE Development Pillars





### GREEN BUILDING SUSTAINABLE Development Goals





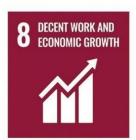


































### GREEN BUILDING SUSTAINABLE Development Goals





















# **Lebanon Crisis**



### **Turn Problems to Opportunities**

Six Powerful Tips

- Start to believe you can
- Don't focus on the problems, focus on finding opportunities
- 3 Think of what it is you want to achieve
- 4 Think about how you can accomplish your goal
- 5 Take different views of the situation
- 6 Make it a habit; see every problem as an opportunity



# **ARZ 2.0 GBRS What for?**

1: **Quantifies** online the performance of buildings

2: Offers bankable reports

3: **Enhances** the CSR (Corporate Social Responsibility) of a business

# **ARZ 2.0 GBRS What for?**

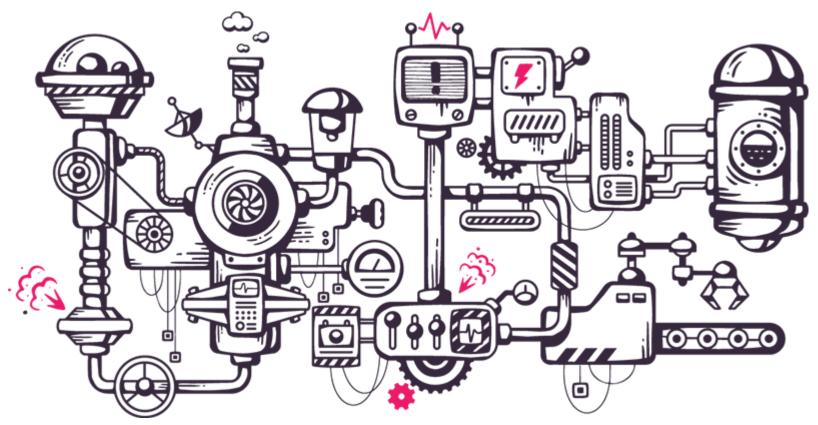
4: A friendly **guide** for the Architects and Engineers

5: A one-stop source for Arch. and Eng. Students

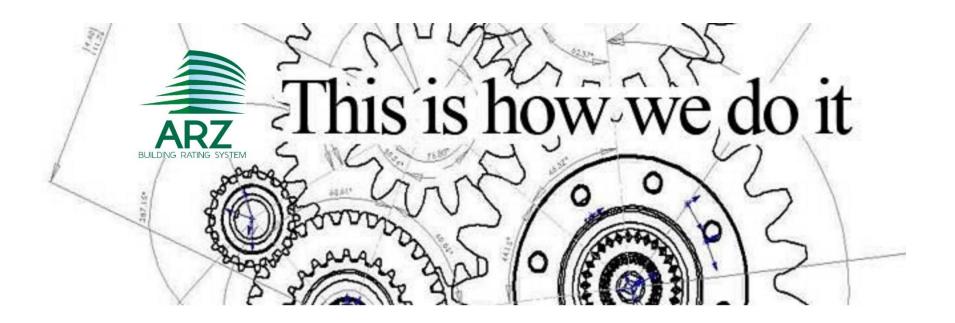
6: Acts as a TPA (**Third Party Assessor**) for a fair and impartial building project evaluation



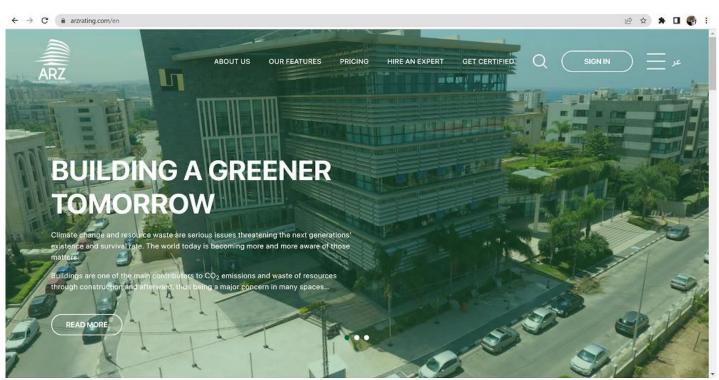
# GREEN BUILDING RATING SYSTEM IS it Complex?



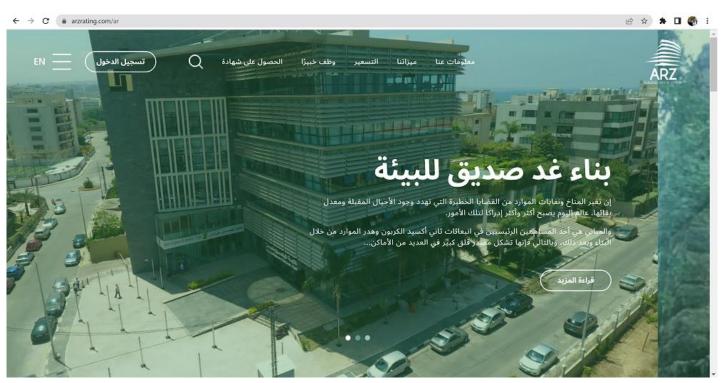












### 1: to understand the sustainable living



Don't forget to recycle

properly and avoid

single-use plastics.

awareness of the importance

of sustainability with those

around you.

Source: iberdrola.com

t-shirts to glasses, shoes

or toothbrushes.

2: to give guidelines for a proper design



3: to give guidelines how to construct building

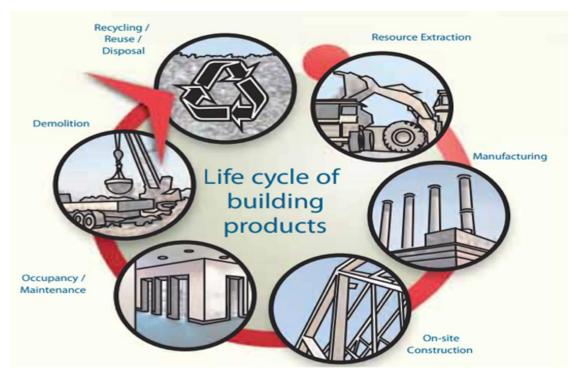


4: to assure safety and healthy space for occupants



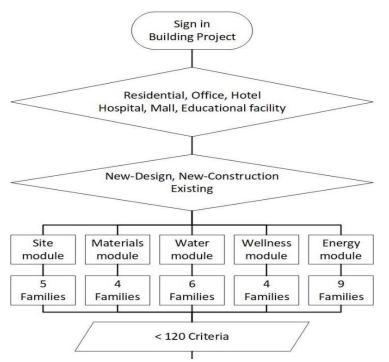
Source: Facebook

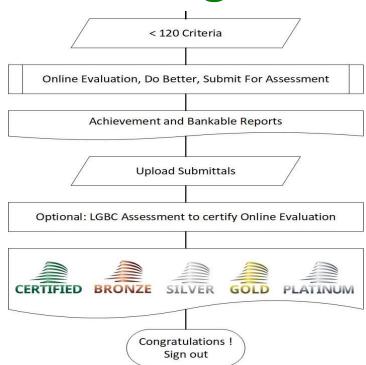
5: to objectively evaluate building sustainability



Source: connect4climate.org

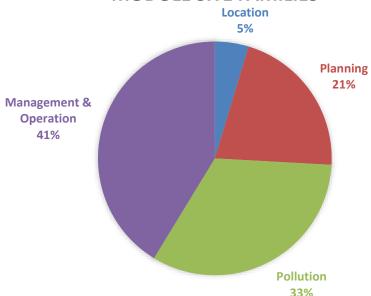
# **ARZ 2.0 GBRS Process: arzrating.com**



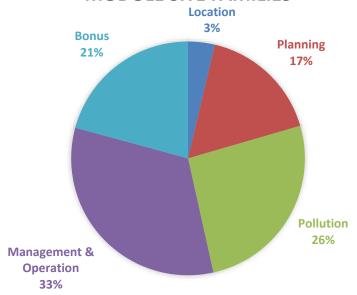




### **MODULE SITE FAMILIES**



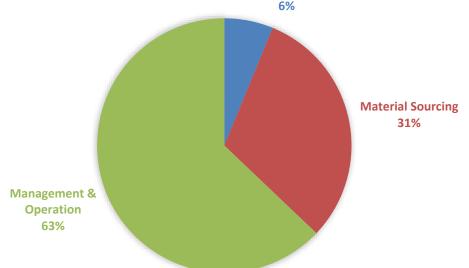
### **MODULE SITE FAMILIES**





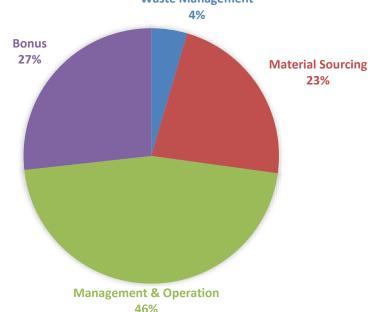
### **MODULE MATERIALS FAMILIES**

Waste Management 6%

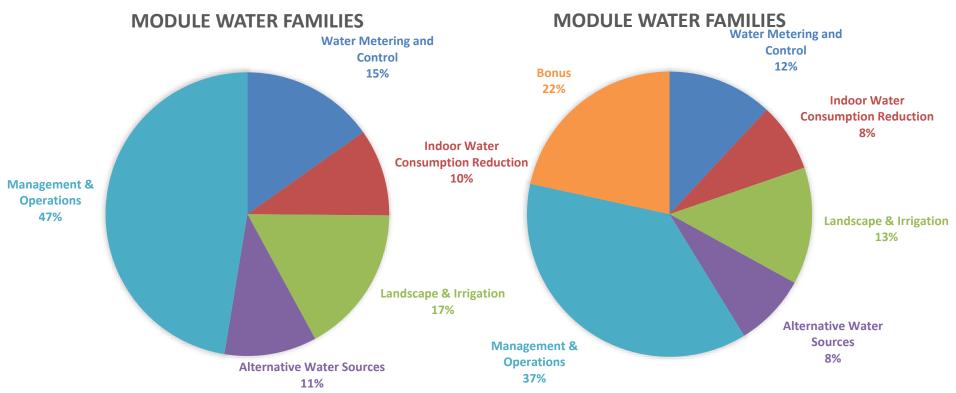


### **MODULE MATERIALS FAMILIES**





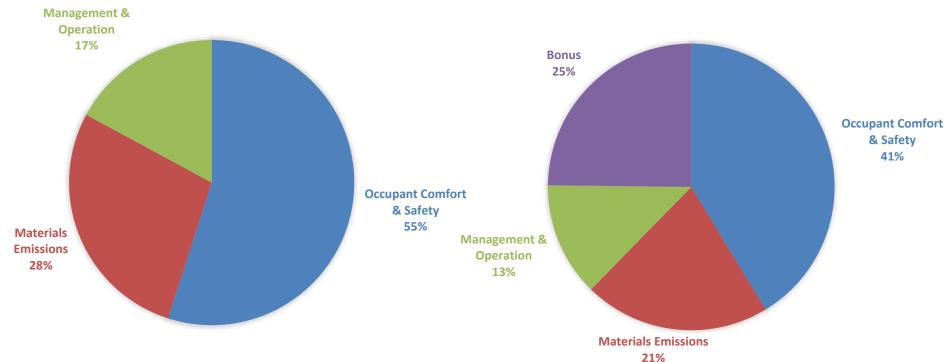






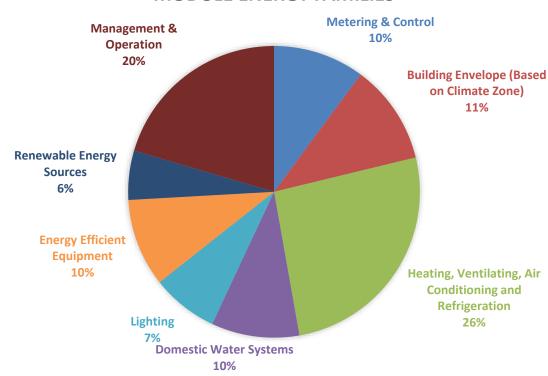
### **MODULE WELLNESS FAMILIES**

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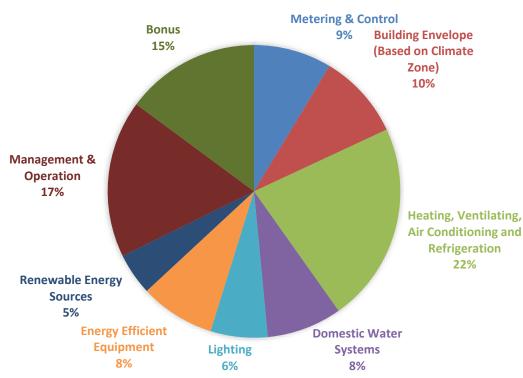


### **MODULE ENERGY FAMILIES**





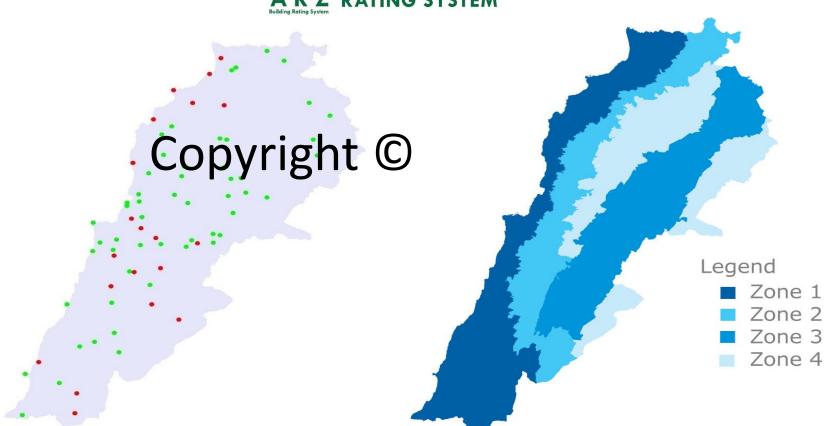
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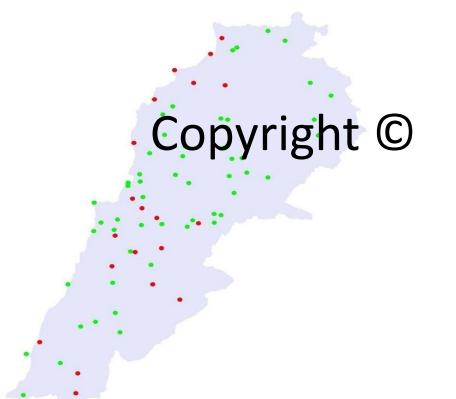
# ARZ 2.0 GBRS Updates: Lebanon Specific

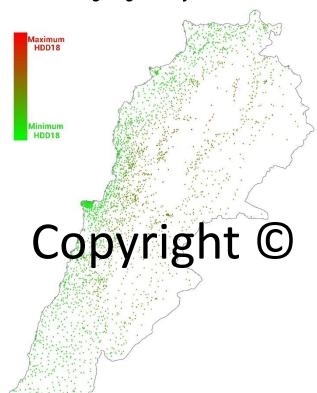






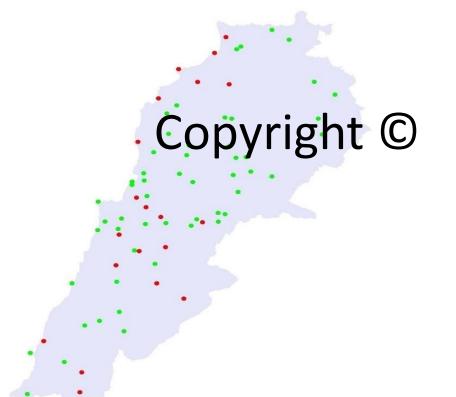
### **Heating Degree Days - HDD18**

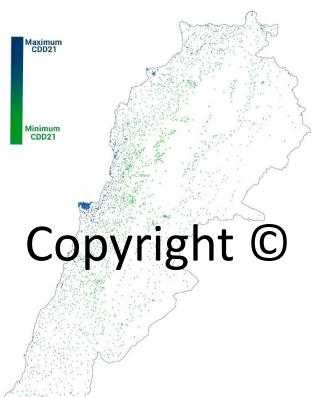




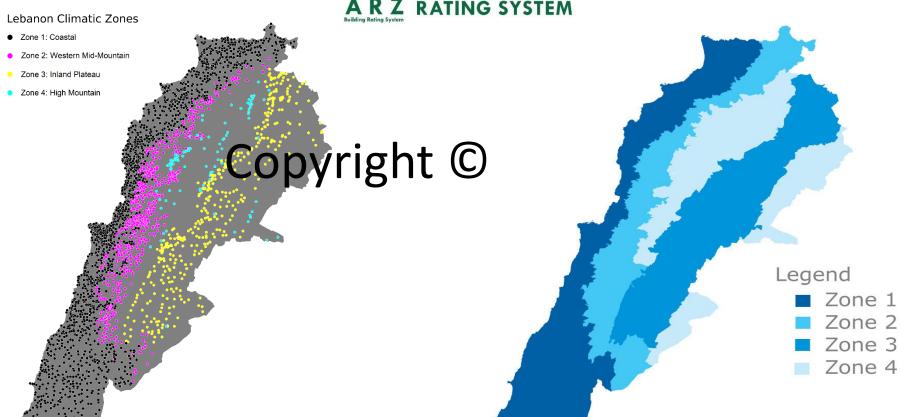


### **Cooling Degree Days - CDD21**











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# ARZ 2.0 GBRS Web Portal www.arzrating.com Thank you riadassaf@hotmail.com