



Webinar on Star Labelling for Energy Efficient Homes

Organized by Bureau of Energy Efficiency (BEE)

14th May 2020

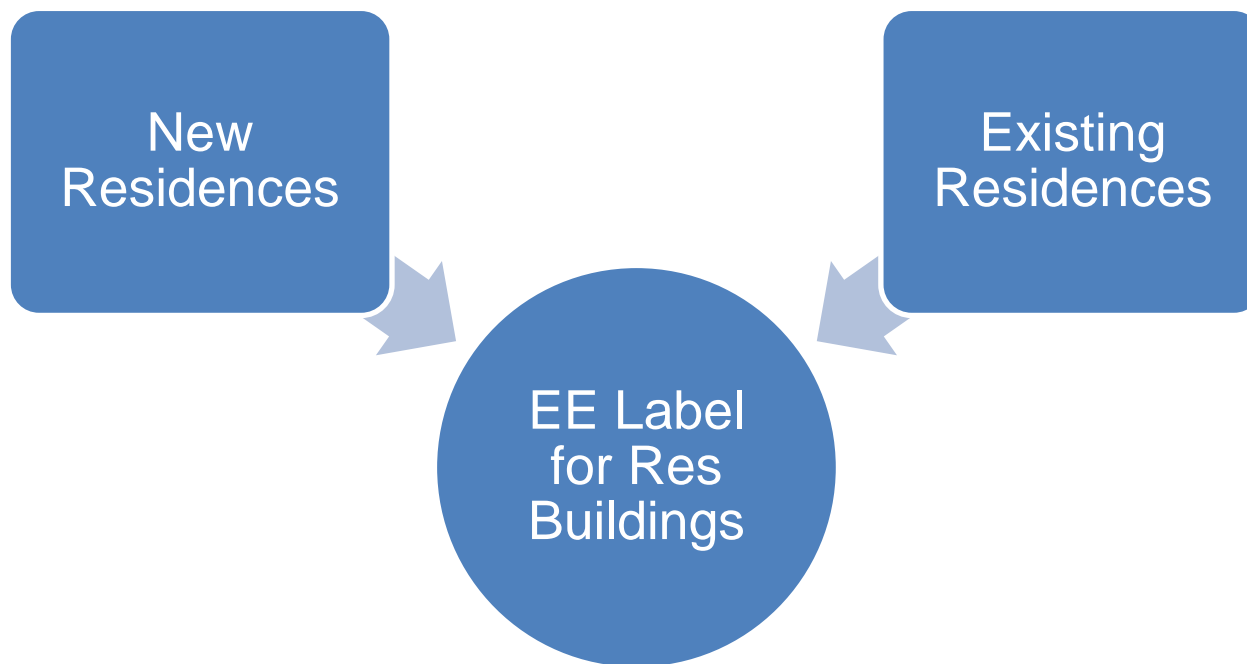
Abdullah Nisar Siddiqui

Technical Expert, GIZ

abdullah.siddiqui@giz.de



Scope of labelling Program



There is **no minimum requirement** with respect to Area or Connected load (kW) for a dwelling unit to be covered under this labeling program.



EE Label Criteria



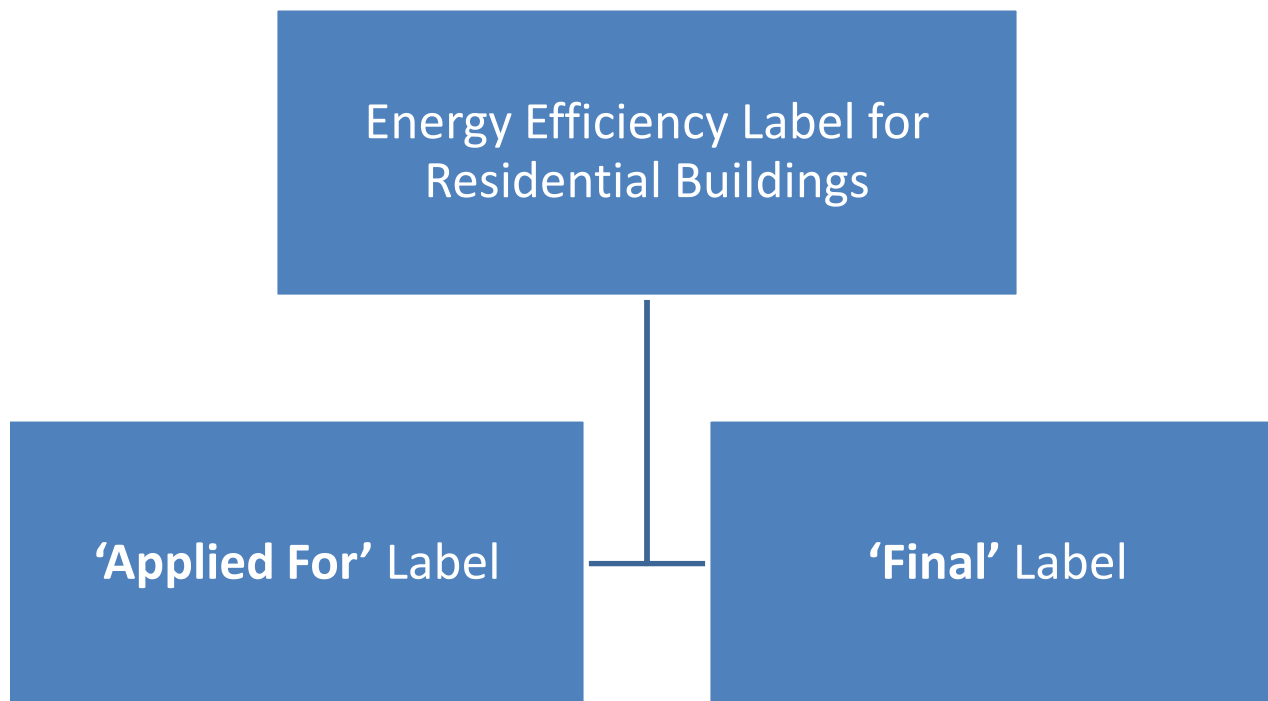
Star Rating awarded in the basis on EPI (**Energy Performance Index**)

Energy Performance Index = Annual Energy Consumption (**kWh**)/Built up area (**m²**)

- ✓ BEE has prepared an **online platform** for the User of Label to apply for seeking an award of label under this program
- ✓ The online platform consists of a **Simulation Based Tool** which will calculate the EPI of respective dwelling unit

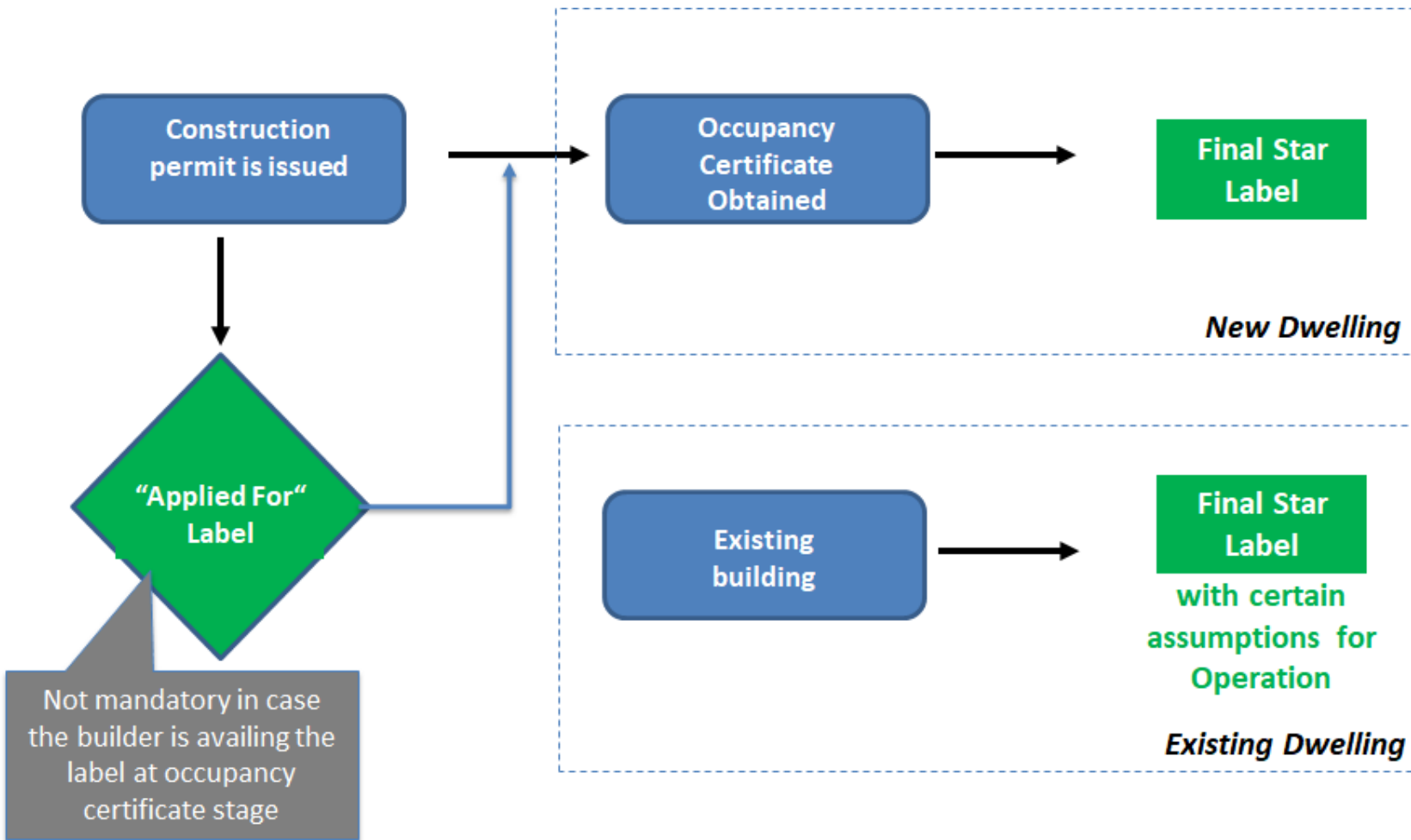


Types of Label





Classification of labelling stages





EPI Calculation for the Labelling program



- **Star Rating awarded on the basis on EPI (Energy Performance Index)**
- **Energy Performance Index = Annual Energy Consumption (kWh)/Built up area (m²)**
- **EPI Calculation**
 - **EPI for AC spaces at 24 degrees set-point (E1) +**
 - **EPI for other spaces at IMAC Natural Ventilation temperatures (E2)**
 - **E1 and E2 includes following systems**
 - **Building envelope characteristic**
 - **Lighting system**
 - **Comfort system (AC)**



Residential Building Star Rating Plan



Hot & Dry

| | |
|-------|---------------|
| ★ | 55 < EPI ≤ 67 |
| ★★ | 47 < EPI ≤ 55 |
| ★★★ | 38 < EPI ≤ 47 |
| ★★★★ | 29 < EPI ≤ 38 |
| ★★★★★ | EPI ≤ 29 |

Warm & Humid

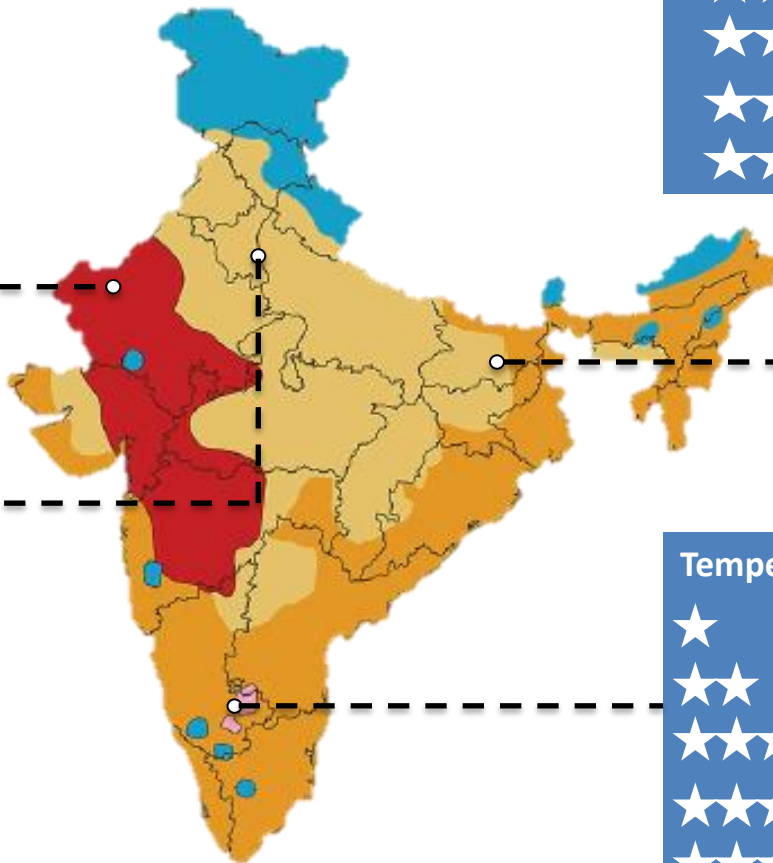
| | |
|-------|---------------|
| ★ | 58 < EPI ≤ 64 |
| ★★ | 49 < EPI ≤ 58 |
| ★★★ | 39 < EPI ≤ 49 |
| ★★★★ | 30 < EPI ≤ 39 |
| ★★★★★ | EPI ≤ 30 |

Composite

| | |
|-------|---------------|
| ★ | 52 < EPI ≤ 60 |
| ★★ | 45 < EPI ≤ 52 |
| ★★★ | 37 < EPI ≤ 45 |
| ★★★★ | 29 < EPI ≤ 37 |
| ★★★★★ | EPI ≤ 29 |

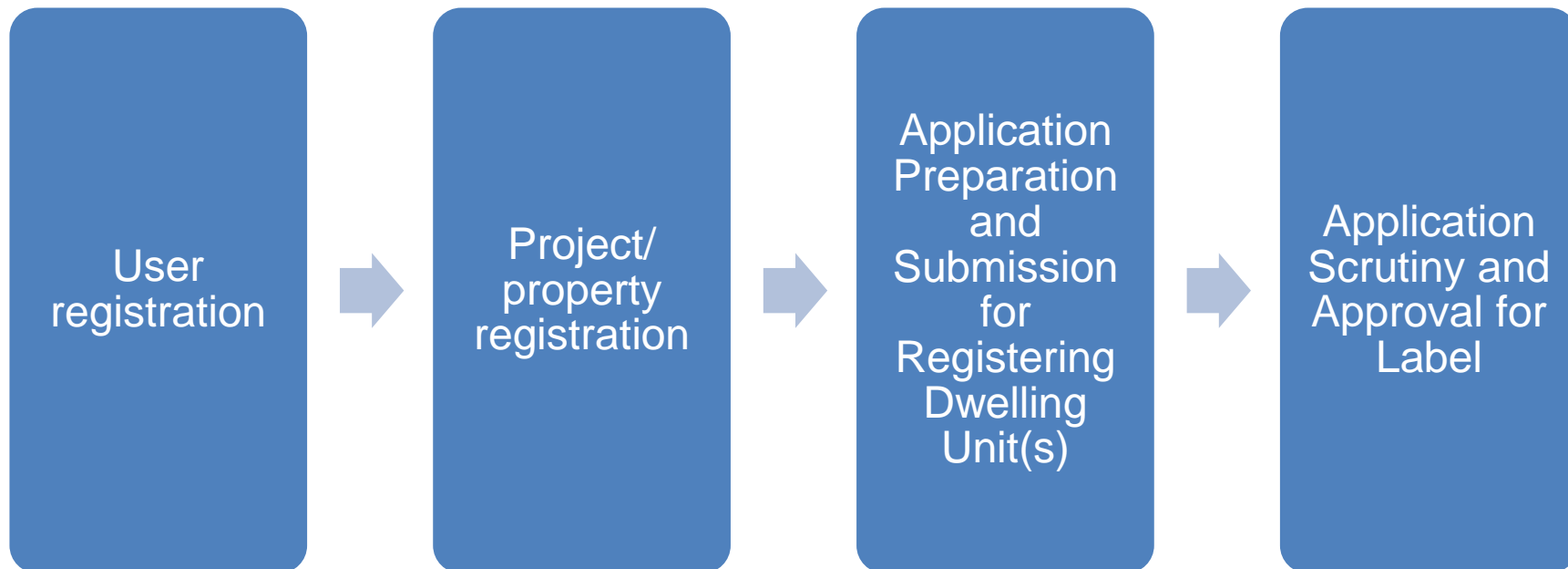
Temperate

| | |
|-------|---------------|
| ★ | 28 < EPI ≤ 31 |
| ★★ | 24 < EPI ≤ 28 |
| ★★★ | 21 < EPI ≤ 24 |
| ★★★★ | 17 < EPI ≤ 21 |
| ★★★★★ | EPI ≤ 17 |





Application Process





Application processing



BEE Star Label Approval

Approval by Competent Authority of BEE



Generation of label through tool

Unique Label Reference no. generated

Approval letter

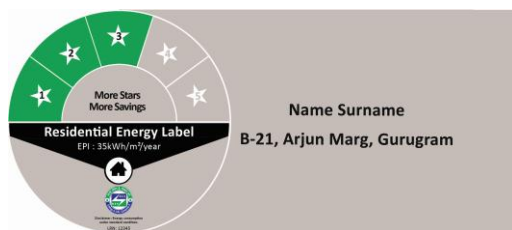
- An online copy of label shall be sent to the applicant through the portal

Name plaque

- Name plaque generated

Passport

- Passport generated online – will include all details of the applicant. Soft copy of the passport auto-emailed to the applicant





Application processing stage contd..



| Label generation | New Dwelling Unit | Existing Dwelling Unit |
|------------------|---------------------|------------------------|
| | “Applied For” Label | Final Star Label |
| Approval letter | Yes | Yes |
| Passport | NA | Yes |
| Plaque | NA | Yes |



Plaque



NAME: ABC
ADDRESS: XXX

- The plaque will be provided to the applicant (developer / owner) of the respective residential dwelling upon approval of 'Final' label. The developer or owner would be required to submit request to BEE for the plaque.



Label validity



Validity of label and plaque from the date of approval by BEE

'Applied For' Label (New Construction)

3 Years

'Final' Star Label (existing construction)

5 Years

Name plaque

Linked with validity of respective Final Star Label



Dwelling ownership & transfer related cases



| Label Stage | Ownership Transfer cases | | |
|----------------------------|---|---|---|
| | Developer to owner | Developer to Developer | Owner to Owner |
| 'Applied For' Label | NA | Not applicable. The already awarded 'Applied for' label stands OBSOLETE. The new developer shall submit application to seek the updated label. | NA |
| 'Final' Label | The owner after seeking the ownership shall submit request to BEE for change of identity details linked with the respective label which was earlier issued to the developer and also submit request for reissue of passport and name plaque | NA | The earlier issued passport and name plaque stands OBSOLETE. The new owner shall submit ownership change documents and respective form to BEE for change in records. Thereafter, the new owner shall submit request for seeking fresh "Name Plaque" |



Fees



| Sr No | Description | Application fee (INR) | |
|-------|--|---|---|
| | | For dwelling unit with built-up area up to 100 m ² (Column A) | For dwelling unit with built-up area more than 100 m ² (in addition with amount mentioned in column A) |
| 1 | Fresh application for 'Applied For' Label | ₹ 2000 | ₹ 5 per m ² for area above 100 m ² |
| 2 | Transfer of label stage from 'Applied For' to 'Final Label' by developer | ₹ 1000 The charges is inclusive of cost of name plaque to be developer (irrespective of plaque size) | No extra charges (not applicable) |



Fees



| Sr No | Description | Application fee (INR) | | |
|-------|--|-----------------------|-------------------------------------|--|
| 3 | Fresh application for 'Final Star Label' either by developer or existing owner | ₹ 2500 | With small size name plaque | ₹ 5 per m ² for area above 100 m ² |
| | | ₹ 2800 | With medium size name plaque | |
| | | ₹ 3000 | With large size name plaque | |
| 4 | Application for change in label details due to transfer of dwelling ownership | ₹ 1000 | | Not applicable |



Thank you



german
cooperation

DEUTSCHE ZUSAMMENARBEIT

giz Deutsche Gesellschaft
für Internationale
Zusammenarbeit (GIZ) GmbH

Abdullah Nisar Siddiqui

abdullah.siddiqui@giz.de