User Manual

For the BCA LEAP Application

Role	LEI
Version	1.10
Date	13 November 2025

Building and Construction Authority

Change Log

Version	Date Updated	Remarks
1.0	21 November 2022	LEAP System Commissioning version
1.1	6 December 2022	Minor addons to copywriting
1.2	12 December 2023	Changes to copywriting and flow
1.3	8 June 2023	Addition to manual based on user feedback
1.4	14 July 2023	Addition to manual based on user feedback Addition of Section 3.1 Advanced filter (Search) Addition of Section 3.2 Editing equipment details Revision of Section 3.4 Retrieve / Resume / Delete draft inspection Addition of Section 3.5 Exporting selected equipment details to excel Revision of Section 3.6 Export all records to excel Revision of Section 6 Notifications
1.5	7 August 2023	Revision of Section 3.3 View Submission
1.6	5 October 2023	Revision of Section 5.1 Changing address details Revision of Section 5.2 Changing contact details (email) Revision of Section 5.3 Changing contact details (phone number)
1.7	6 November 2023	Revision of Section 1.6 Equipment list Revision of Section 2 Renew PTO Application Revision of Section 3 Equipment details Revision of Section 4 Viewing equipment in PTO application list
1.8	27 June 2024	Revision of Section 3.2 Editing equipment details Revision of Section 3.4 Retrieve/Resume/Delete draft inspection
1.9	14 November 2024	Revision of Section 2 Renew PTO Application Revision of Section 3.4 Retrieve / Resume / Delete draft inspection Revision of Section 3.5 Exporting selected equipment details to excel Revision of Section 3.6 Export all records to excel
1.10	13 November 2025	Updating of BCA Logo Revision of Section 1.3 Logging into the system Revision of Section 1.5 The Dashboard Revision of Section 2 Renew PTO Application

Contents page

1 Introduction

The BCA Lifts and Escalators Application system (LEAP) was created to automate the process involved in the lifecycle of lifts and escalators, from inception to termination. The LEAP system would facilitate the involvement of all actors involved in the three main processes of creating, renewing and recommissioning permits to operate for lifts as well as escalators that fall under BCA's purview. It is required that every new escalator or lift obtain a permit before beginning operations. LEIs can log into the system via their Singpass.

This user manual serves to assist you, the LEI in understanding the different functions of the BCA's LEAP system.

1.1 Terminology Used

Term	Definition
LEAP	Lifts and Escalators Application Portal
PTO	Permit To Operate
SPE	Specialist Professional Engineer in the Specialized Branch of Lift and Escalator Engineering
LEI	Lift and Escalator Inspector
Major A/R works	Major alteration or replacement works carried out on any lift or escalator specified in the first column of Part 2 of the Second Schedule of the Building Maintenance and Strata Management (Lift, Escalator and Building Maintenance) Regulations 2016

1.2 Statuses used in LEAP

1.2.1 Application Status

Status	Description
Pending SPE Inspection	During new PTO application, SPE selects owner and creates equipment, or During recommission PTO application, SPE initiated an application and SPE yet to submit inspection, or During renewal PTO application, Owner initiated an application and SPE yet to submit inspection
Pending Payment	During new/recommission PTO application, SPE signed and submitted inspection, or During renewal PTO application, Owner initiated renewal application and Owner yet to make payment
Pending PTO Officer Review	During new/recommissioning PTO application, payment was received and SPE has submitted inspection results. The application is currently under review by PTO officer.
Complete	During new/recommission PTO application, PTO Officer approved the application, or During renewal PTO application, Owner made payment and SPE has also submitted inspection
Rejected	During new/recommissioning PTO application, the application was rejected by PTO officer and the SPE has to initiate the application again.
Pending Amendment By SPE	During new/recommission PTO application, PTO Officer rejected the application and route back to SPE for amendments e.g., follow up on some clarifications, or missing documents for processing
Pending BCA Engineer Review	During new/recommission PTO application[1], Owner made payment and SPE submitted inspection, or During renewal PTO application (shortlisted equipment), Owner made payment and SPE submitted inspection

---

[1] Temporarily not applied in LEAP

1.2.2 Equipment Status

Status	Description
Pending SPE Inspection	During new PTO application, SPE has selected owner and created equipment records
Accepted By Owner	During new PTO Application, after SPE submitted inspection for the new equipment, owner reviewed and accepted the equipment to be under his/her ownership.
Rejected By Owner	During new PTO Application, after SPE submitted inspection for the new equipment, owner reviewed and rejected the equipment to be under his/her ownership.
Pending Owner Acceptance	During new PTO application, SPE has submitted inspection results but owner has not accepted the ownership of the equipment
Active	After PTO Officer approves new/recommission PTO application
Active. To suspend from DD/MM/YYYY	PTO is valid but Owner suspends equipment in advance with effect from a future date
Suspended	When Owner suspends an equipment with effect from today
	PTO expired as the PTO Expiry Date is before today
Terminated	When Owner terminates an equipment

1.2.3 Inspection Status

Status	Description
Saved as Draft	SPE has saved the inspection as draft or has not submitted the inspection report with his digital signature
Pending BCA Review	SPE signs and submitted inspection for new/recommission PTO application, or SPE signs and submitted inspection for renewal PTO application (shortlisted equipment)
Approved	PTO Officer approved inspection for new/recommission PTO application, or SPE approved LEI's inspection (for renewal application only)
Rejected	During new/recommissioning PTO application, the application was rejected by PTO officer and the SPE has to initiate the application again.
Pending Amendment By SPE	During new/recommission PTO application, PTO Officer rejected the application and route back to SPE for amendments e.g., follow up on some clarifications, or missing documents for processing
Completed	SPE signs and submits inspection for renewal PTO application
Pending SPE Review	LEI submitted inspection for renewal PTO application
Pending Amendment By LEI	SPE routed back to LEI for renewal PTO application

1.2.4   Payment Status

Status	Description
Pending Payment	Payment has not been received.
Paid	Owner makes payment and selected E-Payment and paid via Stripe successfully, or Finance Officer updates the payment status to Paid after verifying payment received from Pay Later, or GIRO Deduction is successful
Pending Giro	Owner selected GIRO as payment method for Renewal PTO application
Refund Requested	Owner requested for refund, or Finance Officer mark payment for refund
Refunded	Finance Officer updated refund status as refunded
Pending Refund	Finance Officer updated refund status as pending refund
Failed	GIRO Deduction is unsuccessful

1.2.5   Refund Status

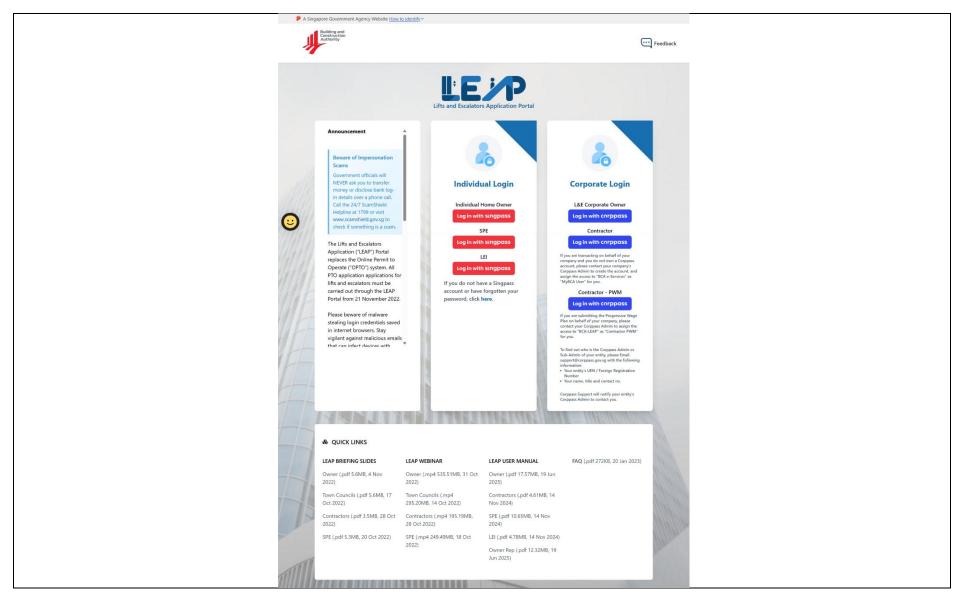| Status	Description
Pending Refund	Owner requested for refund, or Finance Officer marked payment for refund
Refunded	Finance Officer updated refund status as refunded
Rejected	Finance Officer updated refund status as rejected

1.3 Logging into the system

To login into the system, LEIs can begin by selecting the LEI login with Singpass. LEI will then upon successful entry be directed to the Singpass web page.
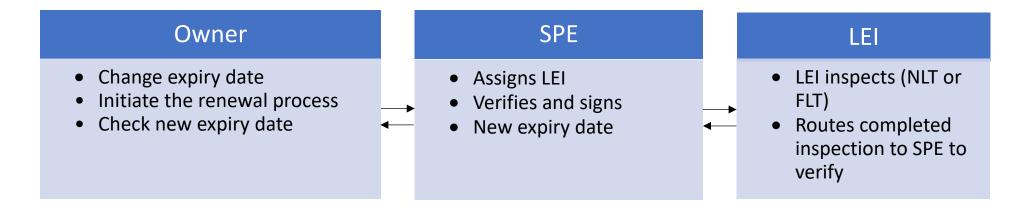
1.4 Role of LEI: Renewal

The process of renewal begins with the Owner. Once initiated, SPEs will receive an email alert whereby they can then begin to conduct the inspection or assign it to the LEI. Once assigned, the LEI can begin the process of assisting to inspect by scanning or uploading the QR code. Do note that past QR codes generated from OPTO can longer be processed. All previous hardcopy documentation will now be submitted via the online inspection checklist. Once the renewal process is completed the new expiration date would be changed automatically.
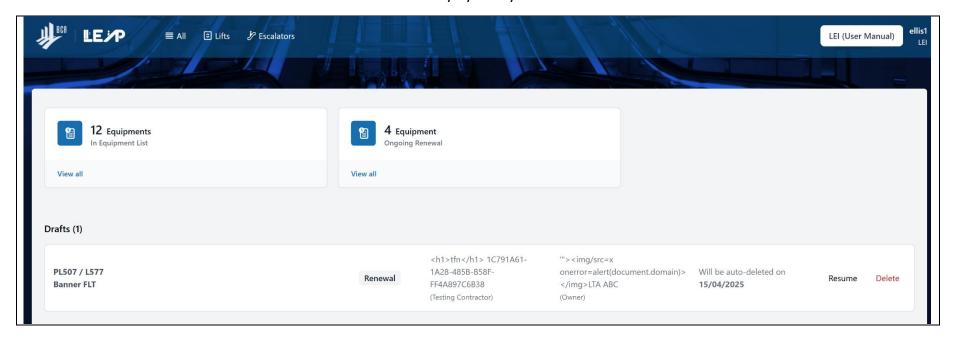
Owner	SPE	LEI
• Change expiry date • Initiate the renewal process • Check new expiry date	• Assigns LEI • Verifies and signs • New expiry date	• LEI inspects (NLT or FLT) • Routes completed inspection to SPE to verify

1.5 The dashboard

Here is the dashboard for the LEAP system. The smart filter, Ongoing renewal furthers assists LEIs to quickly navigate to the desired actions.

Should there be any drafts saved previously during the inspections, LEI can quickly access from the Dashboard page too. Do note that any draft records more than 3 months old will be deleted automatically by the System.
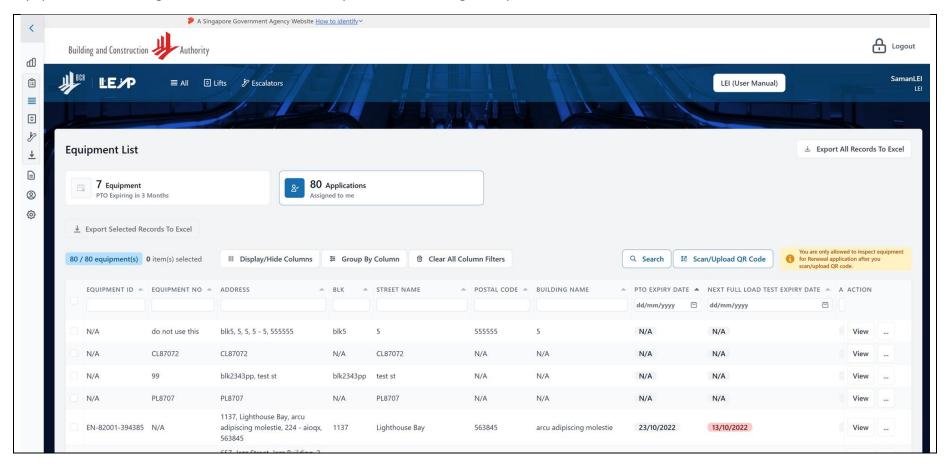
1.6 Equipment list

The equipment list is the main area of the software, whereby most of the required actions happen here. It gives a clear view of all the equipment that belongs to the LEI and can be easily filtered according to requirements.
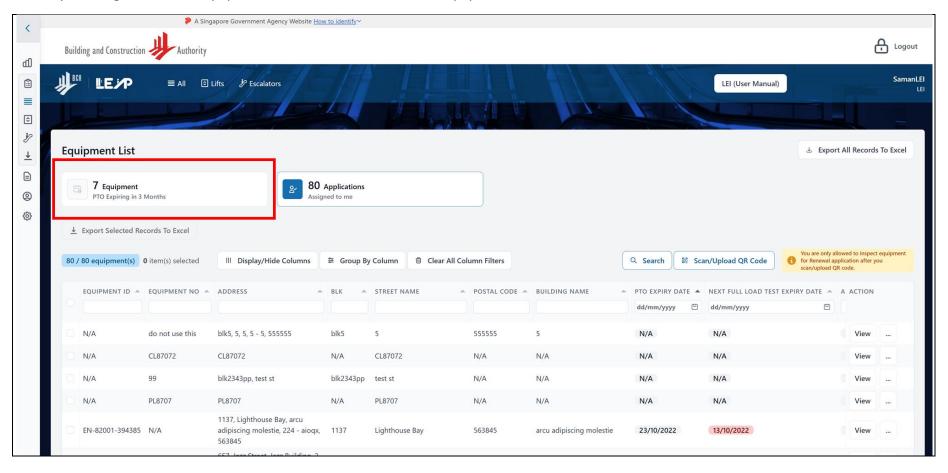
1.7 Smart filter View - View PTO expiring in 3 months

For easy filtering of relevant equipment select smart filter view in equipment list
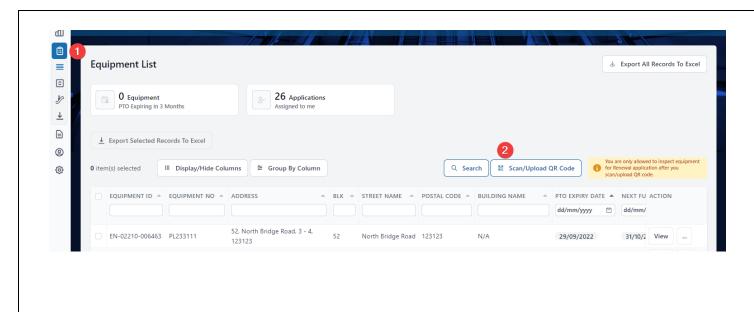
2 Renew PTO application

LEIs are only involved in the renewal process. This process of renewal begins with the Owner and once initiated, SPEs will receive an email alert whereby they can then begin to conduct the inspection. This is done by scanning or uploading the QR code of a particular equipment. **This role may be assigned to the LEI to conduct the inspection**. Do note that past QR codes generated from OPTO can no longer be processed. All previous hard copy documentation will now be submitted via the online inspection checklist. Once the renewal process is completed the new expiration date will be changed automatically.

Owner	SPE	LEI	SPE
• Change expiry date • Initiate the renewal process • Assign contractors	• SPE assigns inspection to LEI	• LEI accepts assignment and does the inspection • Inspected PTO is then routed back to SPE (SPE's would be required to use SignSG at the point of final declaration before submitting the completed inspection)	• SPE completes renewal process • Both SPE & Owner can proceed to the equipment list and see that PTO expiry date has been renewed by 1 year

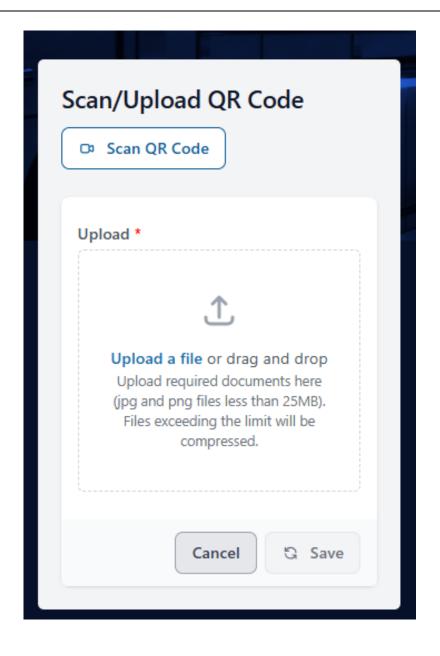LEI can scan or upload the QR code image to renew PTO applications by following the steps below

1. Begin by selecting the equipment list from the sidebar

2. Then select scan/upload code

Note:
Only QR codes that have been generated via the LEAP application can be used. Older OPTO QR codes would be invalid.

Either scan or upload QR code
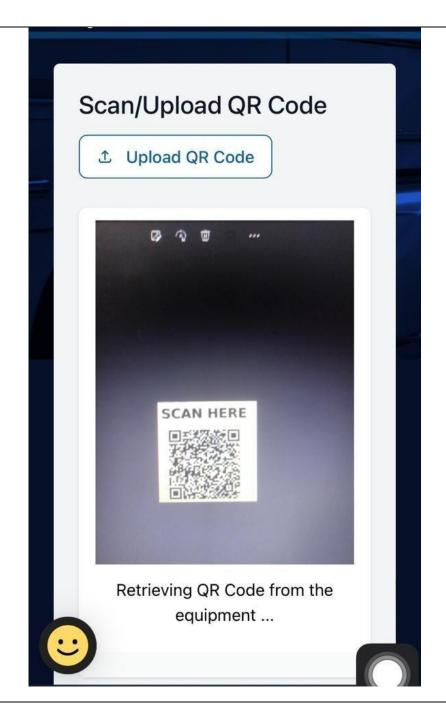
This screen shows the upload QR code from a mobile view

Note:
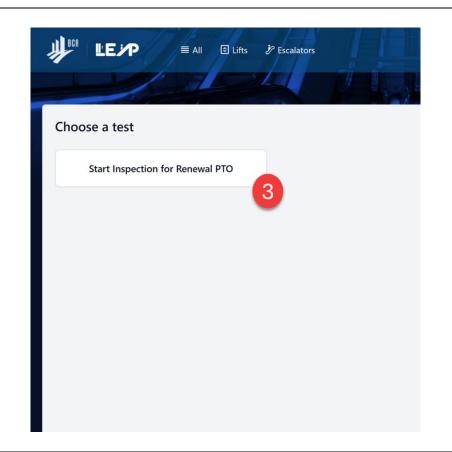To upload the QR code, please save as an image file prior to upload.

Either scan or upload QR code

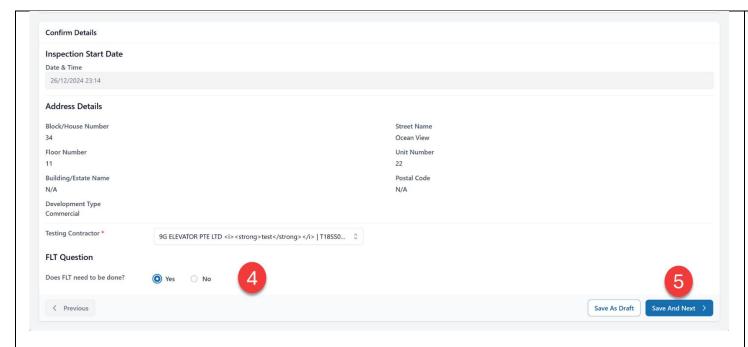This screen shows the scan QR code from a mobile view

Once QR code is verified, the system will take you to the choose a test screen

3. Select Start Inspection for Renewal PTO

This moves you to the Renewal Inspection screen.

Notes regarding Full-load test (FLT) checklist:
- The FLT checklist is applicable for the following types of Traction Lifts: CarLift, PassengerLift, HomeLift, CargoLift, FireLift, ServiceLift.
- When the SPE indicates "Y" for the FLT question, FLT date will be updated based on inspection start date and FLT expiry date will be set to inspection start date + 5 years
- If the renewal inspection is conducted 57 months onwards after the last FLT, the FLT checklist becomes mandatory for the SPE to fill out.
- System will display a banner message on the inspection page to remind the SPE on the upcoming FLT expiry date, which will be shown between 48-57 months since the last FLT:

4. Select Testing Contractor

If equipment type is Traction Lifts, LEI need to select if FLT needs to be done:
   a. If FLT needs to be done, System will automatically display FLT checklist portion for LEI to fill out
   b. If FLT doesn't need to be done, System will automatically display NLT checklist portion for LEI to fill out

5. Click Save and Next

Note:
The inspection start date cannot be editable for inspections for Renewal and Recommission PTO applications.

Renewal Inspection Saved as Draft

Please note that the next Full Load Test for L577 will be due on 14 November 2025

| 01 | CONFIRM DETAILS | 02 | RENEWAL PTO INSPECTION CHECKLIST | 03 | REVIEW INSPECTION DECLARATION |

Equipment Information

Equipment ID
L577

Equipment Type
Cargo Lift

Owner Name, ID
'"><img/src=x onerror=alert(document.domain)></img>LTA ABC, UEN8439586I

PTO Expiry Date
31/03/2025

○ Other Observations

∨ Expand All   **∧ Collapse All**

Status: Satisfactory (S)   Not Satisfactory (NS)   Not Applicable (NA)

Select All As Satisfactory   ⑥

Machine room/head room   ∨

Hoist way   ∨

Lift car and Pit   ∨

Machine room / Head room (Additional checks/tests for full load)   ∨

Hoist Way (Additional checks/tests for full load)   ∨

Lift Car and Pit (Additional checks/tests for full load)   ∨

Other Observations   ∨
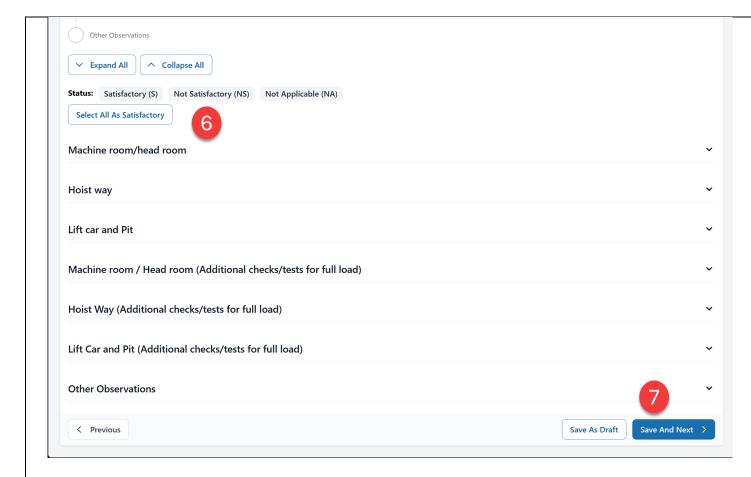
⟨ Previous   Save As Draft   **Save And Next ⟩**   ⑦

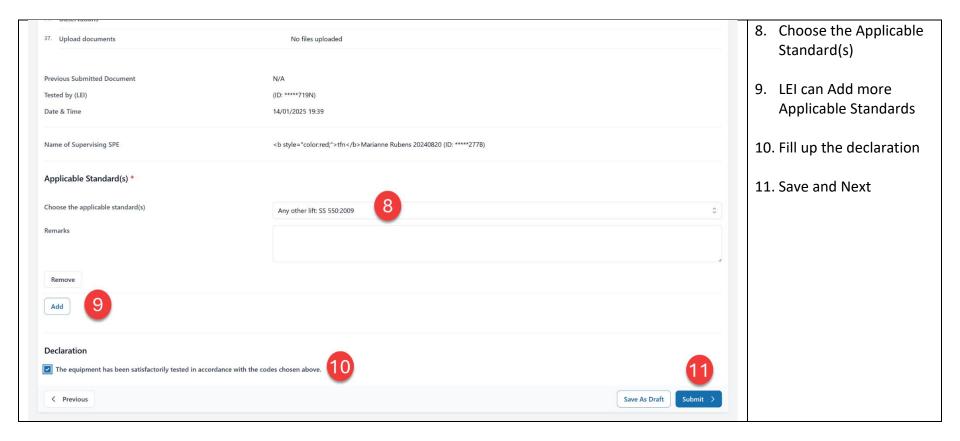6. Fill out the renewal checklist

7. Select Save And Next

Note:
The LEAP system will not allow the LEI to proceed if there is any non-satisfactory (NS) item. Status of all items (except those marked as "Not Applicable (NA)") should be "Satisfactory (S)", at the point of inspection, before submission.

At this point LEI can save the inspection as draft as well. Drafts can be resumed from the Dashboard page, or by scanning/upload QR code.
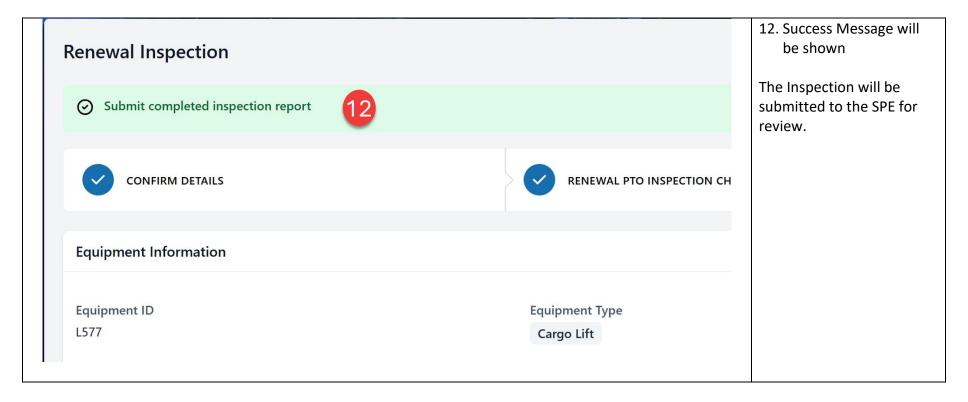
The maximum file upload size is 25 MB, and any supporting documents can be uploaded in the Other Observations section.
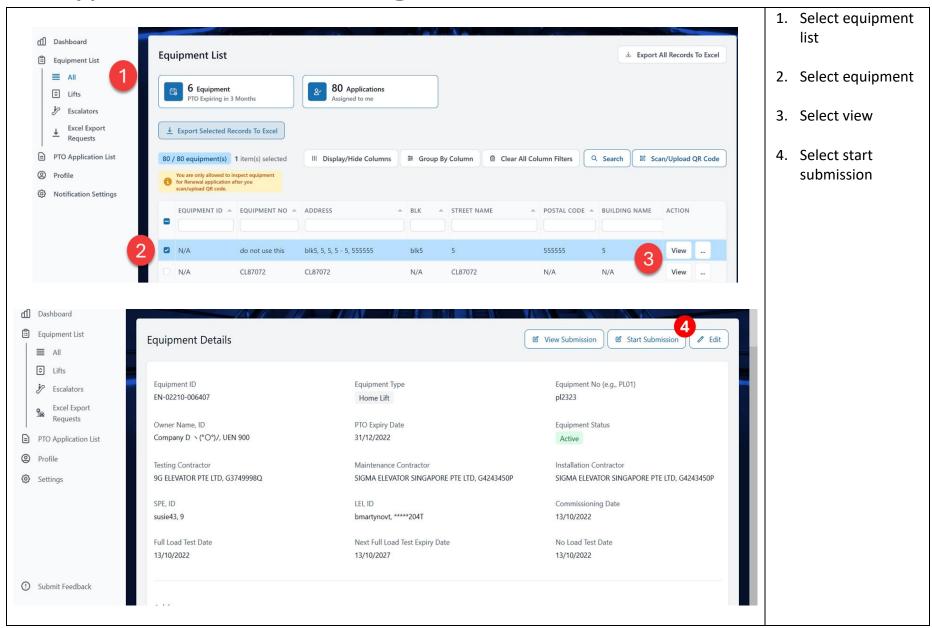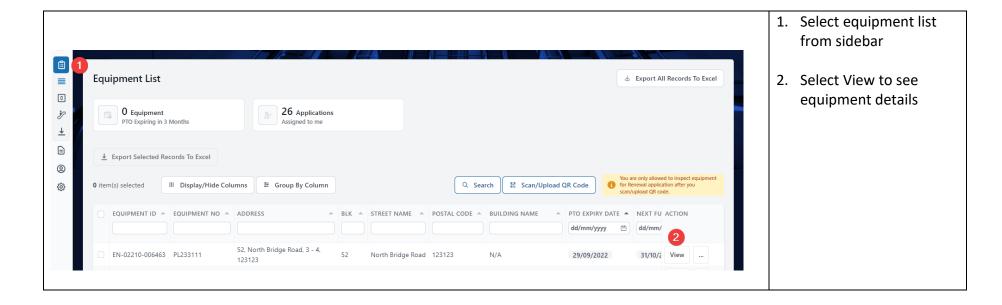
37. Upload documents   No files uploaded

Previous Submitted Document   N/A
Tested by (LEI)   (ID: *****719N)
Date & Time   14/01/2025 19:39

Name of Supervising SPE   `<b style="color:red;">tfn</b>` Marianne Rubens 20240820 (ID: *****277B)

Applicable Standard(s) *

Choose the applicable standard(s)   Any other lift: SS 550:2009

Remarks

Remove

Add

Declaration

☑ The equipment has been satisfactorily tested in accordance with the codes chosen above.

< Previous   Save As Draft   Submit >

8. Choose the Applicable Standard(s)

9. LEI can Add more Applicable Standards

10. Fill up the declaration

11. Save and Next

Renewal Inspection

✓ **Submit completed inspection report** 12

✓ CONFIRM DETAILS   ✓ RENEWAL PTO INSPECTION CH

Equipment Information

Equipment ID
L577

Equipment Type
Cargo Lift

12. Success Message will be shown

The Inspection will be submitted to the SPE for review.

2.1 Bypass QR code scanning for PTO renewals

1. Select equipment list

2. Select equipment

3. Select view

4. Select start submission

3 Equipment details

1. Select equipment list from sidebar
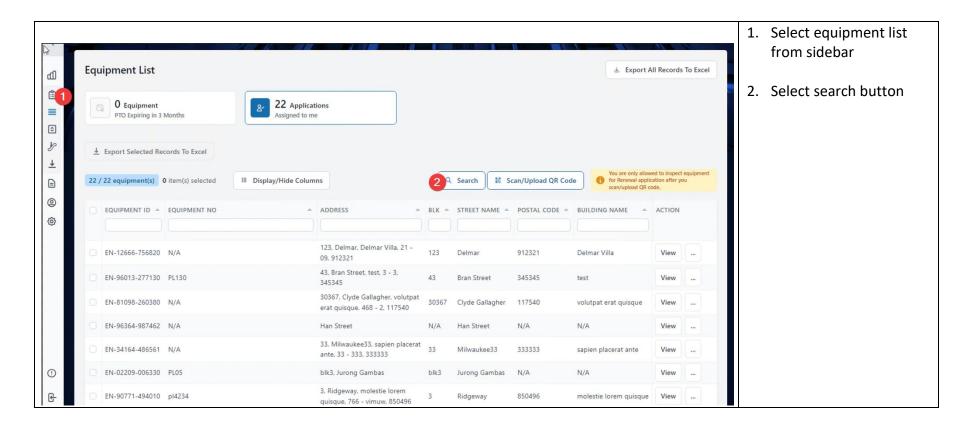
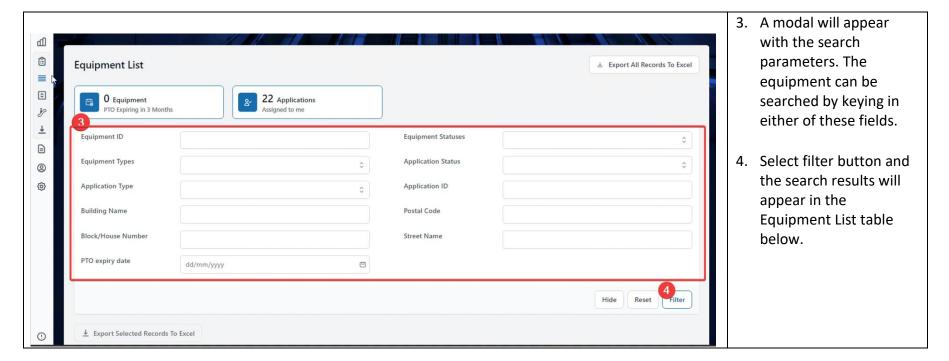2. Select View to see equipment details

3.1 Advanced filter (Search)

Select advanced filter to filter out desired equipment in equipment list.

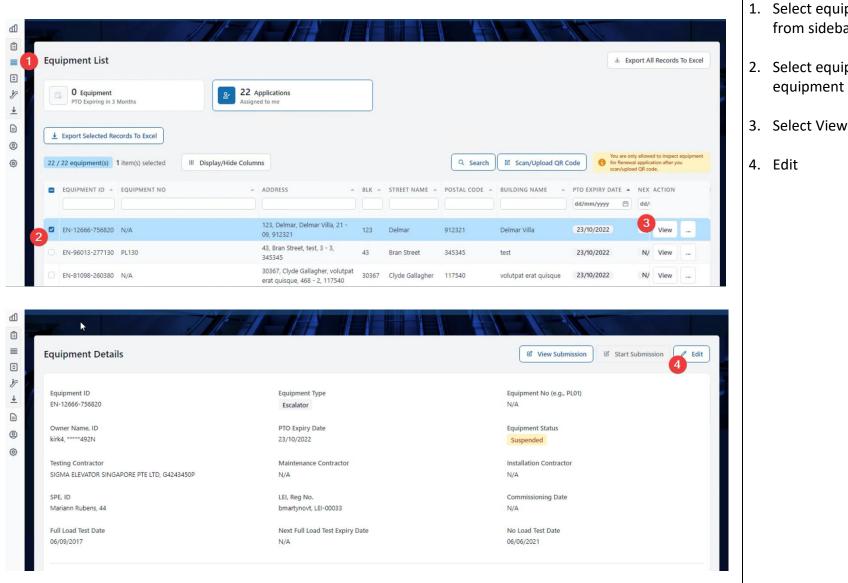1. Select equipment list from sidebar

2. Select search button

3. A modal will appear with the search parameters. The equipment can be searched by keying in either of these fields.

4. Select filter button and the search results will appear in the Equipment List table below.

3.2 Editing equipment details

1. Select equipment list from sidebar

2. Select equipment for equipment list

3. Select View

4. Edit
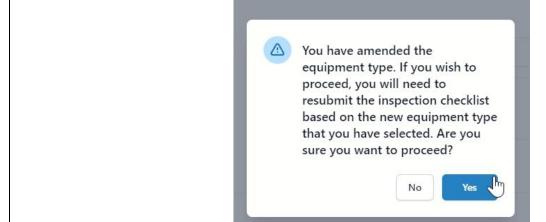
5. Make required changes for Address Details

6. Click "Save Address Details"

7. Make required changes for Technical Information. Should the Equipment Type be changed, the technical information will be populated accordingly

8. Click "Save Technical Information"

Note:
The saving of address details and technical information will be independent.

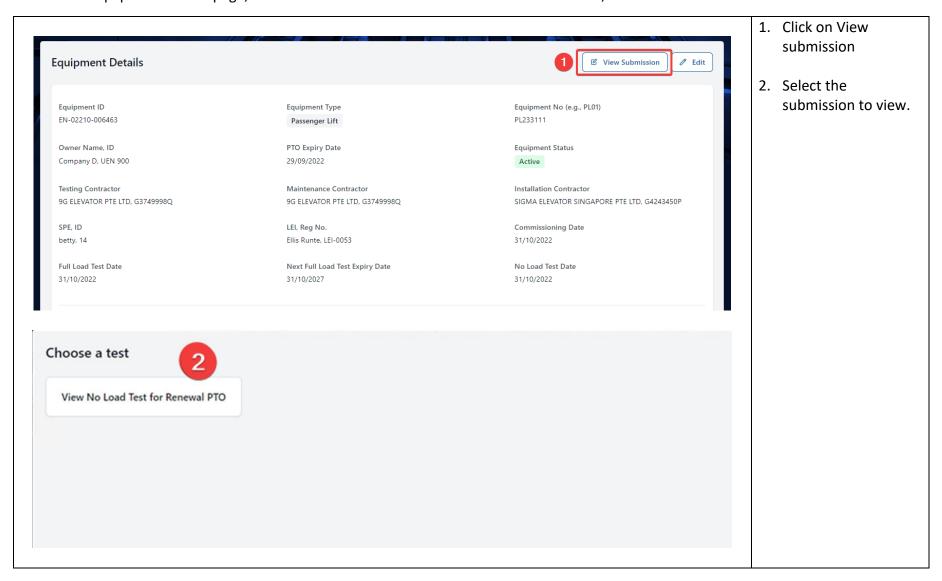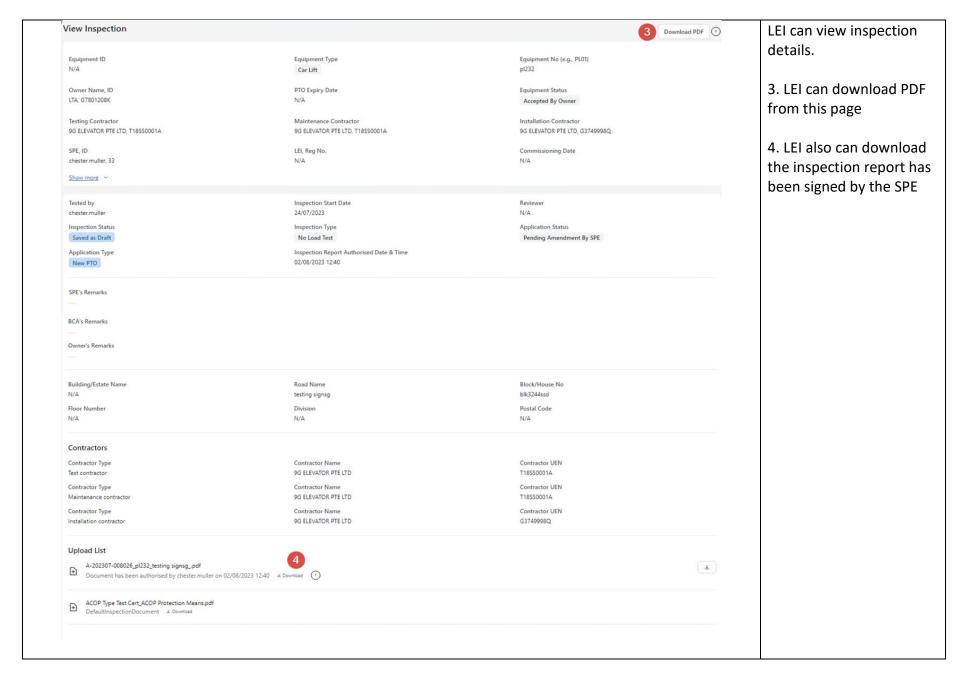| | You have amended the equipment type. If you wish to proceed, you will need to resubmit the inspection checklist based on the new equipment type that you have selected. Are you sure you want to proceed?

No   Yes | | **Note:**
If an equipment's status is in ongoing inspection, LEI will see a pop-up message indicating that the inspection will need to be redone if the equipment type is amended. |

3.3 View Submission

Once in the equipment details page, LEI can view the submissions made for a No Load Test, Full Load Test.
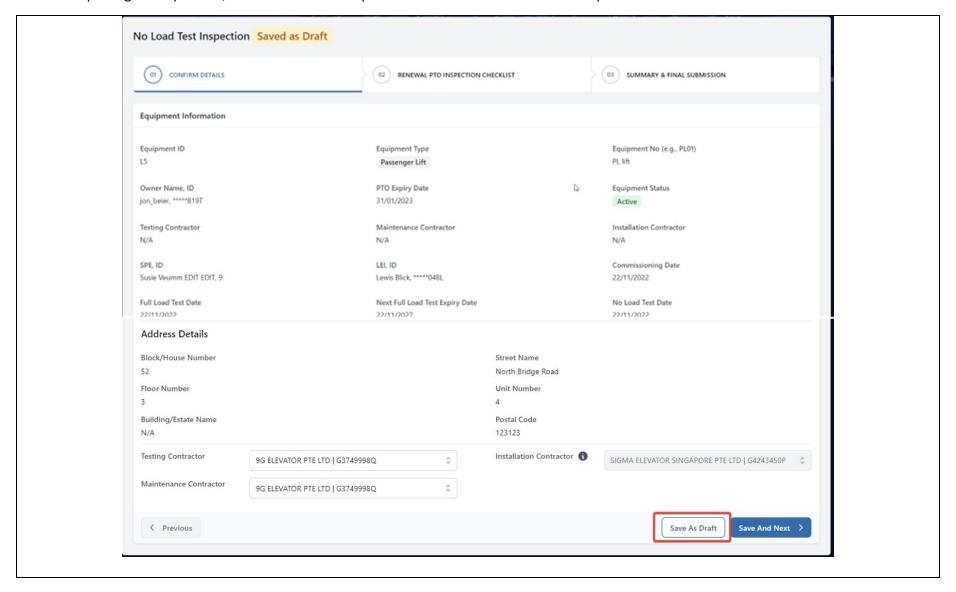
	1. Click on View submission 2. Select the submission to view.

View Inspection

 Download PDF

| Equipment ID | Equipment Type | Equipment No (e.g., PL01) |
| N/A | Car Lift | pl232 |

| Owner Name, ID | PTO Expiry Date | Equipment Status |
| LTA, G7801208K | N/A | Accepted By Owner |

| Testing Contractor | Maintenance Contractor | Installation Contractor |
| 9G ELEVATOR PTE LTD, T18SS0001A | 9G ELEVATOR PTE LTD, T18SS0001A | 9G ELEVATOR PTE LTD, G3749998Q |

| SPE, ID | LEI, Reg No. | Commissioning Date |
| chester.muller, 33 | N/A | N/A |

Show more ∨

| Tested by | Inspection Start Date | Reviewer |
| chester.muller | 24/07/2023 | N/A |

| Inspection Status | Inspection Type | Application Status |
| Saved as Draft | No Load Test | Pending Amendment By SPE |

| Application Type | Inspection Report Authorised Date & Time | |
| New PTO | 02/08/2023 12:40 | |

SPE's Remarks
—

BCA's Remarks
—

Owner's Remarks
—

| Building/Estate Name | Road Name | Block/House No |
| N/A | testing signsg | blk3244ssd |

| Floor Number | Division | Postal Code |
| N/A | N/A | N/A |

Contractors

Contractor Type	Contractor Name	Contractor UEN
Test contractor	9G ELEVATOR PTE LTD	T18SS0001A
Maintenance contractor	9G ELEVATOR PTE LTD	T18SS0001A
Installation contractor	9G ELEVATOR PTE LTD	G3749998Q

Upload List

A-202307-008026_pl232_testing signsg_.pdf
Document has been authorised by chester.muller on 02/08/2023 12:40 ⤓ Download

ACOP Type Test Cert_ACOP Protection Means.pdf
DefaultInspectionDocument ⤓ Download

LEI can view inspection details.

3. LEI can download PDF from this page

4. LEI also can download the inspection report has been signed by the SPE

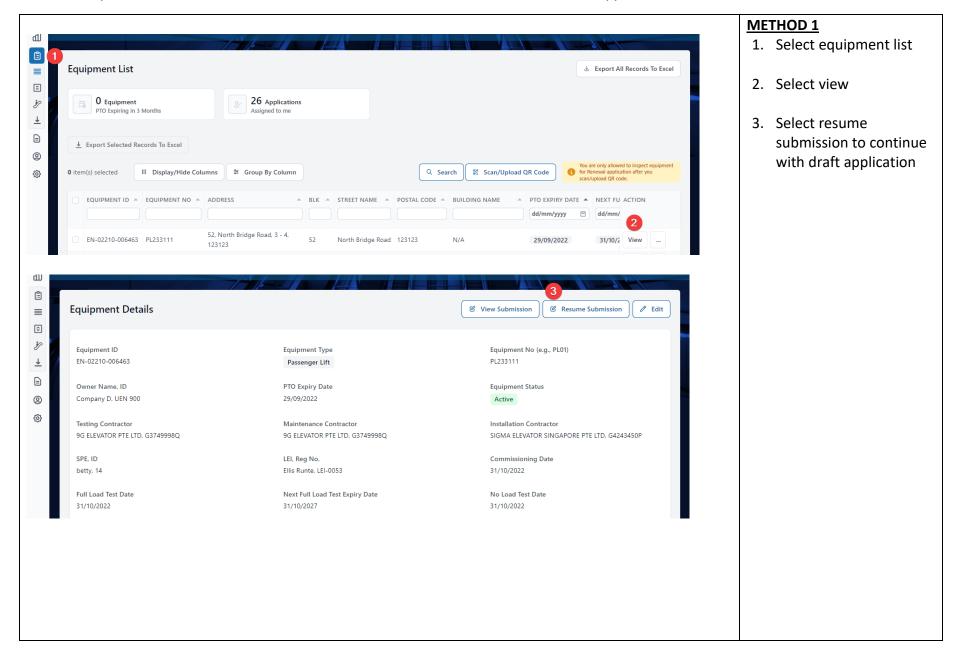# 3.4 Retrieve / Resume / Delete draft inspection

When completing an inspection, LEIs can save the inspection as a draft and return to complete it later.
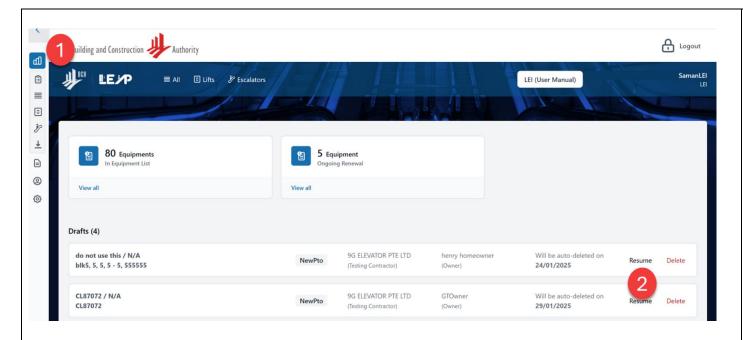
Once the inspection is saved as draft, to retrieve it, there are 2 methods to retrieve draft applications.
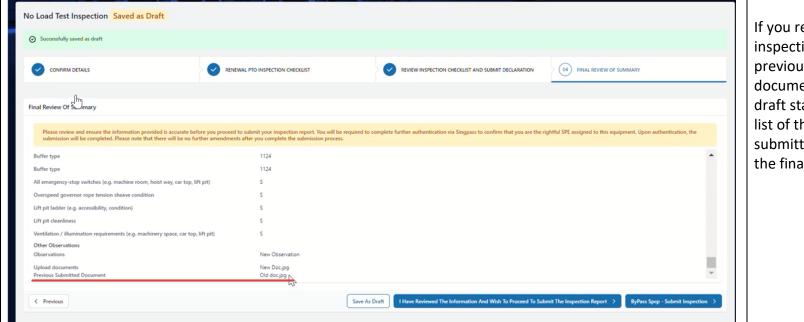

METHOD 1

1. Select equipment list

2. Select view

3. Select resume submission to continue with draft application

METHOD 2

1. Go to Dashboard

2. Under "Draft", select either Resume to resume application or Delete to delete draft application

Note:
Any draft records more than 3 months old will be deleted automatically by the system.

If you resume an inspection where you previously uploaded documents during the draft stage, you will see a list of those previously submitted documents on the final review page.

3.5 Exporting selected equipment details to excel

1. Begin by selecting the equipment list from the sidebar

2. Then select the desired equipment(s) from equipment list

3. Click on Export Selected Records to Excel

4. Check all the desired information to be exported

5. Scroll down and Click export and the equipment list should appear as a download

3.6 Export all records to excel

1. Select equipment list

2. Select export all records to excel

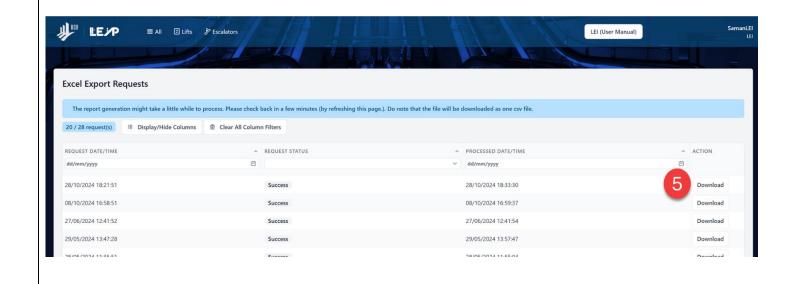(No equipment needs to be selected as this function exports all records).

3. Check the required items

4. Click Export will navigate the LEI to the Export request list page.

Because of the large quantity of items being transferred to excel, the download may take some time.

Please return in a couple of minutes to check if the system has finished generating.

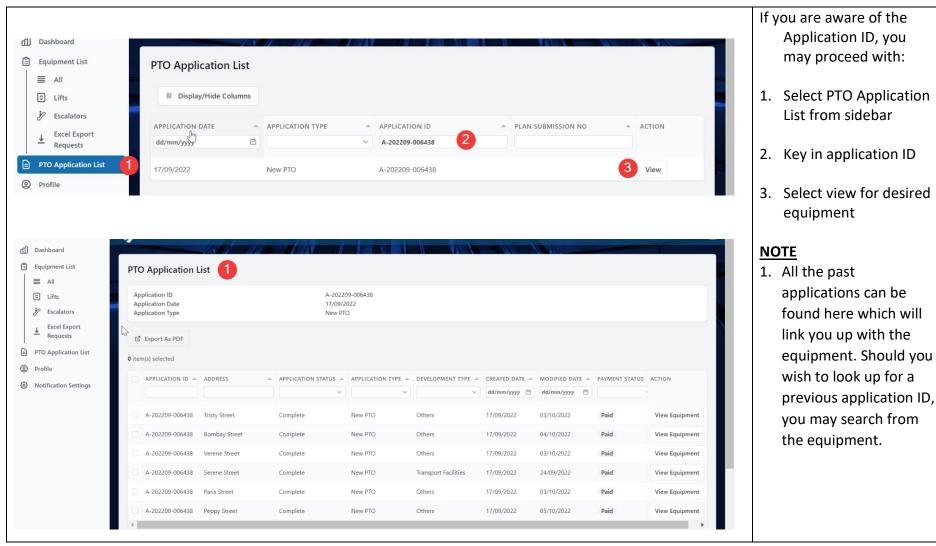Once ready, the Download button will be enabled and no longer be greyed out.

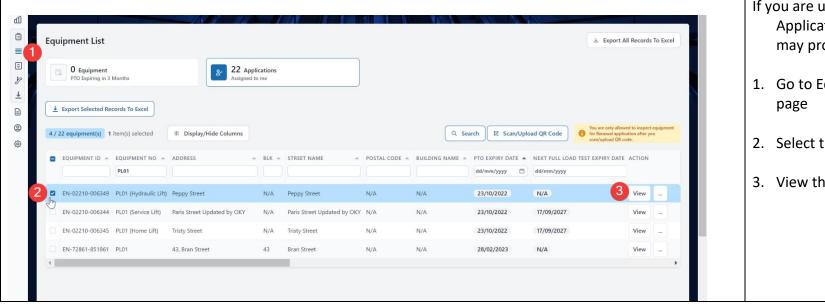5. Select Download

4 Viewing equipment in PTO application list
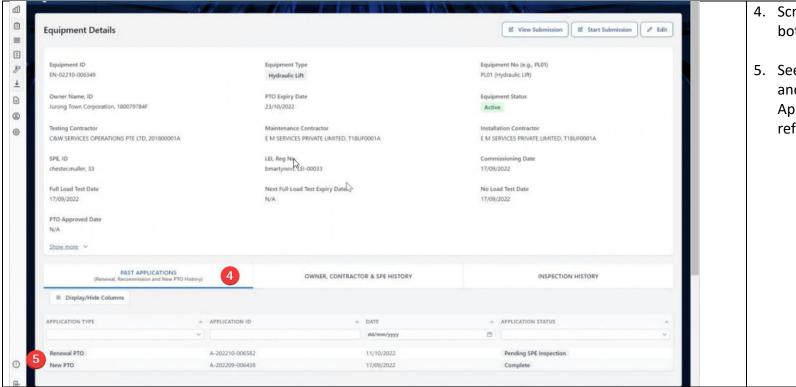
4.1 If Application ID is known upfront

If you are aware of the Application ID, you may proceed with:

1. Select PTO Application List from sidebar

2. Key in application ID

3. Select view for desired equipment

NOTE

1. All the past applications can be found here which will link you up with the equipment. Should you wish to look up for a previous application ID, you may search from the equipment.

4.2 If Application ID is not known upfront

If you are unaware of the Application ID, you may proceed with:

1. Go to Equipment List page

2. Select the equipment

3. View the equipment
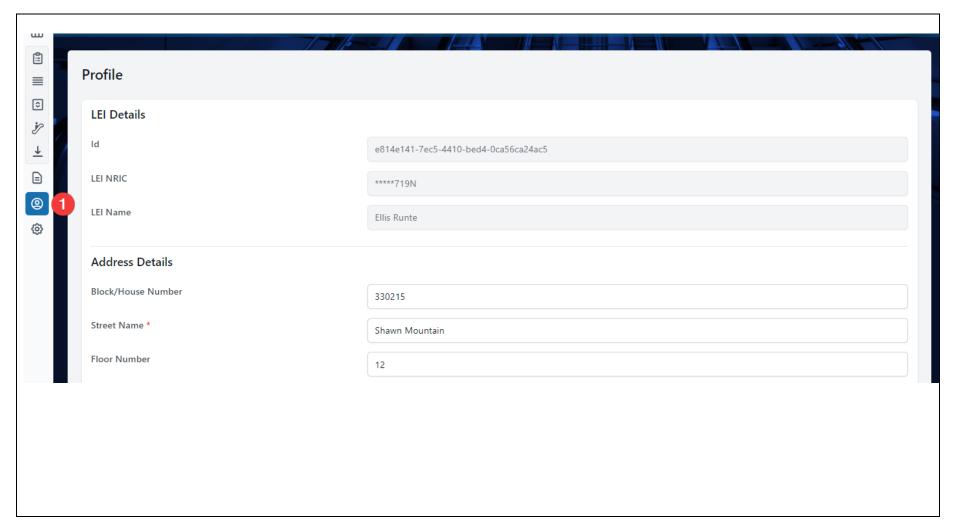
4. Scroll down to bottom of the page

5. See Past Applications and note down the Application ID, and refer to Section 4.1
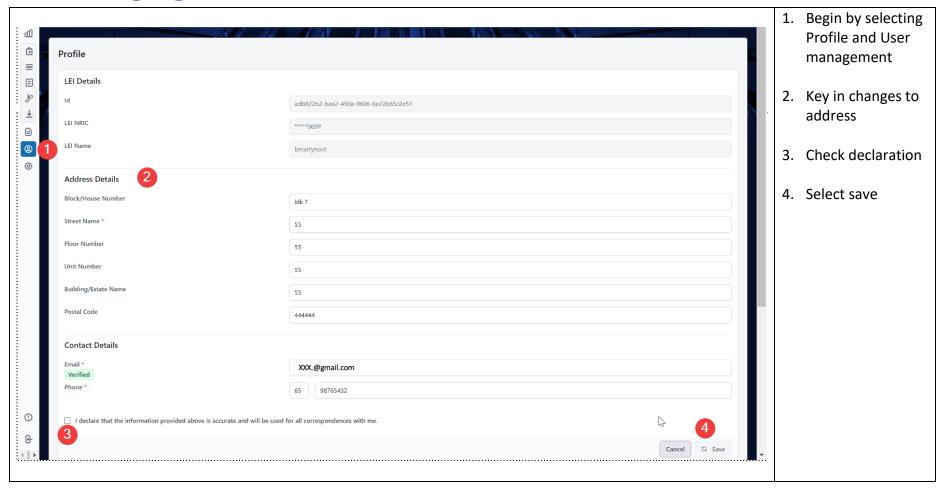
5 Profile and user management

Note: LEI name cannot be edited. Should you require any changes, please approach BCA for assistance.
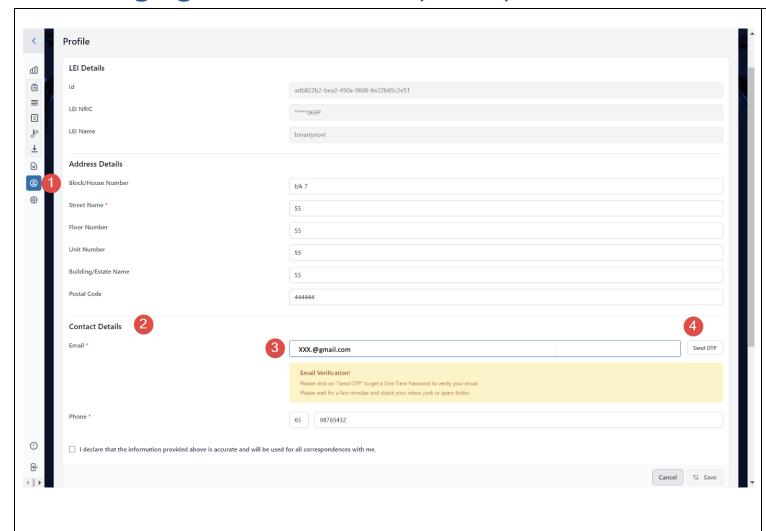
5.1 Changing address details

1. Begin by selecting Profile and User management

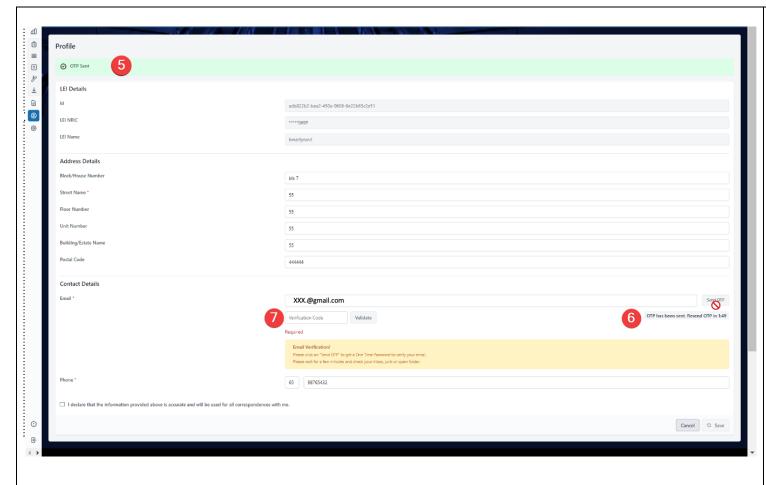2. Key in changes to address

3. Check declaration

4. Select save

5.2 Changing contact details (email)

1. Select profile and user management

2. Go to Contact Details

3. Click on the textbox and a blue border will be shown to ensure the textbox is clicked and in active state. Fill your email address.
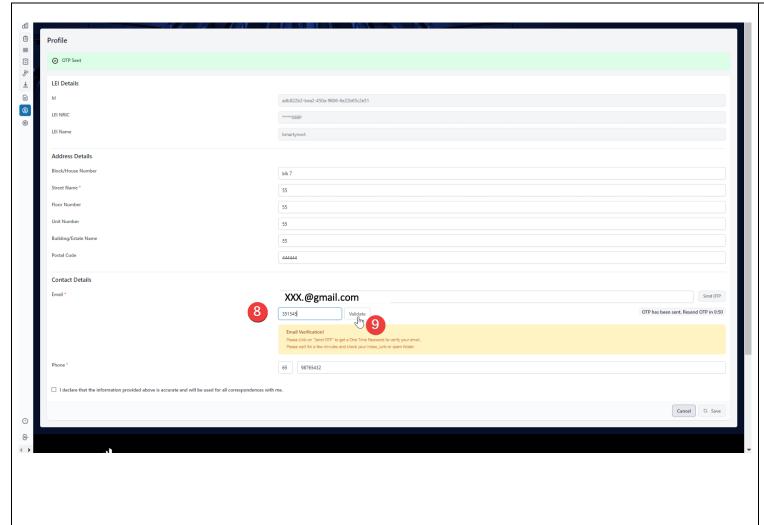
4. Click on Send OTP

5. A green successful message "OTP Sent" will be displayed

6. A message to inform OTP has been sent, with a countdown timer of 2 minutes to request resend OTP. After 2 minutes, the "Resend OTP" button will be enabled.
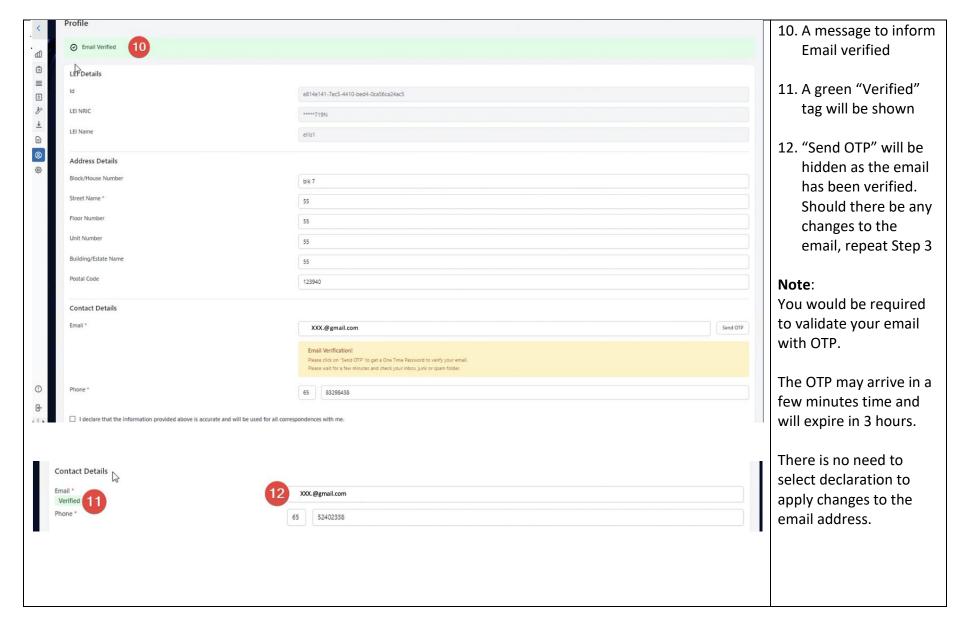
7. A textbox will be displayed with a "Validate" button

8. Click on the textbox and a blue border will be shown to ensure the textbox is clicked and in active state. Fill the OTP sent to your email.

9. Click Validate

10. A message to inform Email verified

11. A green "Verified" tag will be shown

12. "Send OTP" will be hidden as the email has been verified. Should there be any changes to the email, repeat Step 3

Note:
You would be required to validate your email with OTP.

The OTP may arrive in a few minutes time and will expire in 3 hours.

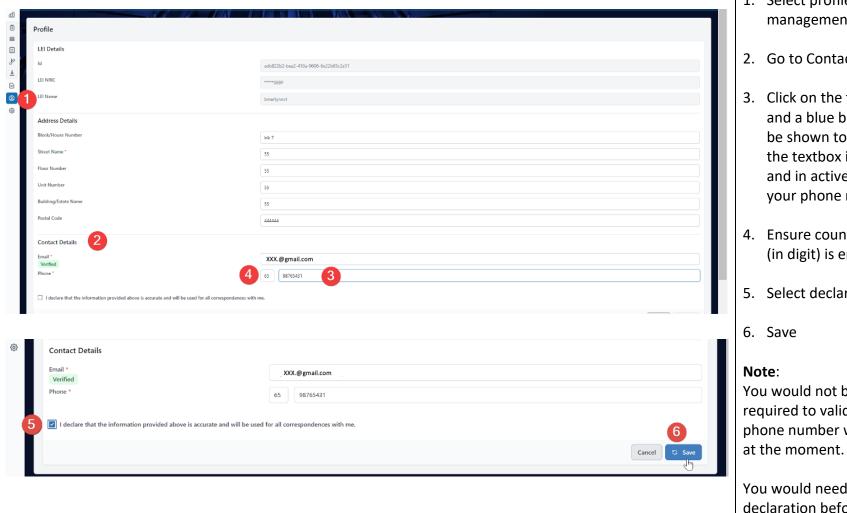There is no need to select declaration to apply changes to the email address.

5.3 Changing contact details (phone number)

1. Select profile and user management

2. Go to Contact Details

3. Click on the textbox and a blue border will be shown to ensure the textbox is clicked and in active state. Fill your phone number

4. Ensure country code (in digit) is entered

5. Select declaration

6. Save

Note:
You would not be required to validate your phone number with OTP at the moment.

You would need to select declaration before "Save" is enabled.

6 Notifications

In this section, LEI can change the frequency of notifications being received. The email address has to be verified in order to receive emails. Refer to Section 5.2 Changing contact details (email). Some emails would not be sent if the equipment is terminated or suspended.

Below are the default notification settings for LEI if they are not configured:

1. Renewal alert – 3 months
2. Full load test alert – 3 months
3. Change in equipment status – Weekly
4. Change in application status – Weekly
5. Preferred Channel – Email

For Preferred Channel – Email, it will be checked if the email verification is successful.

1. Select Notification Settings from sidebar

2. Change frequency for desired alerts

3. Save changes

A successful message will appear to indicate that the notification change has been successful.