



# Towngas

## User Manual of RPI Automated Heat Stress at Work Warning System

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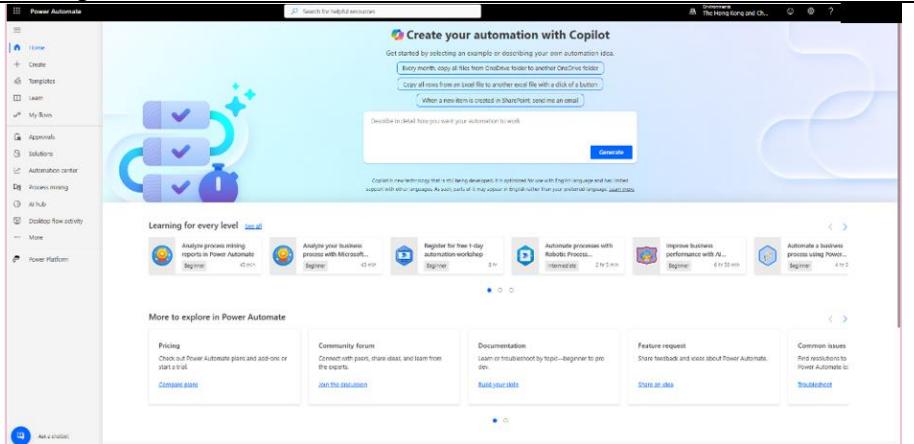
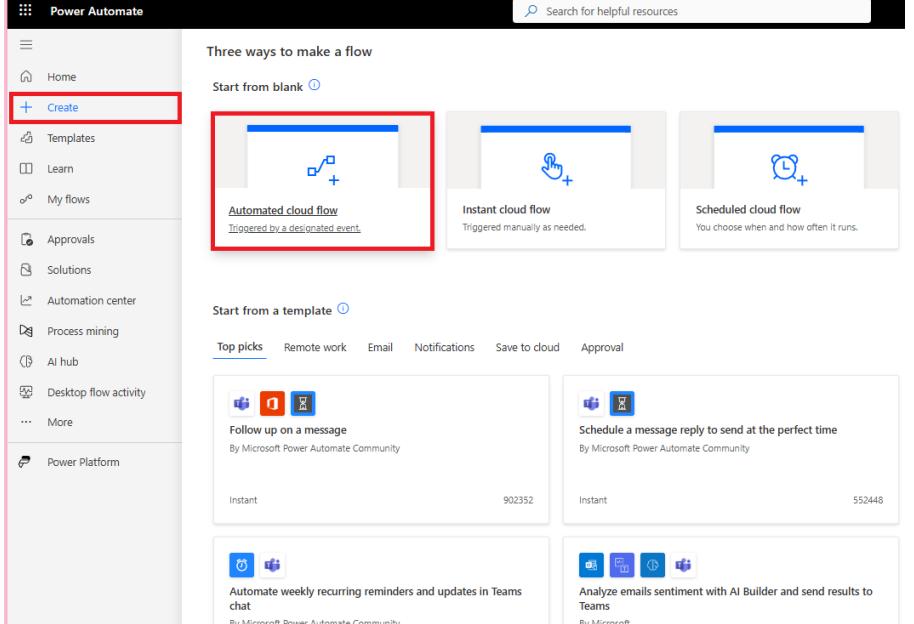
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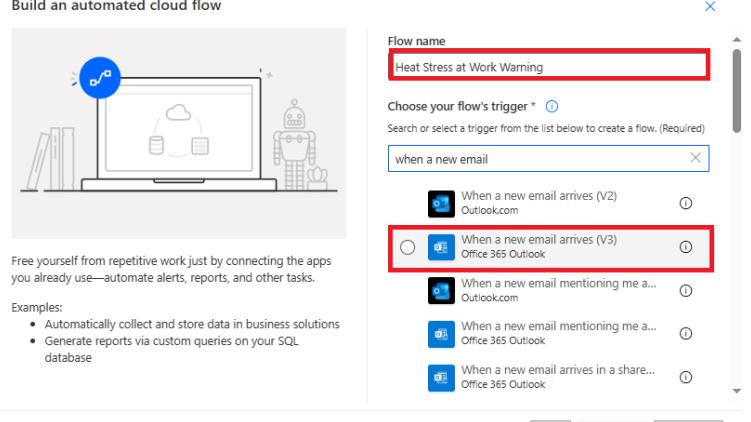
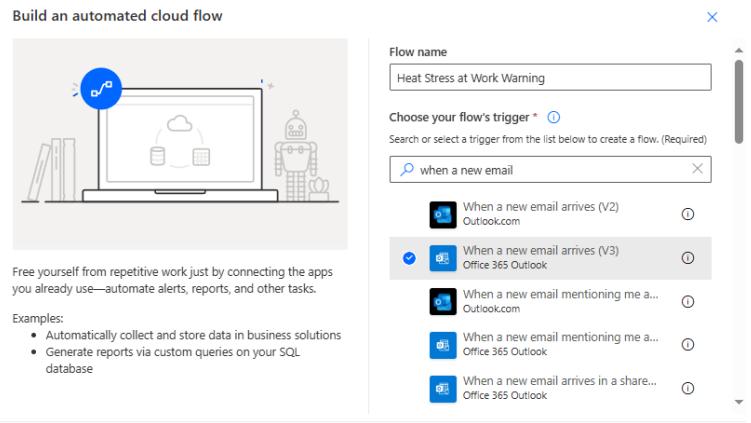
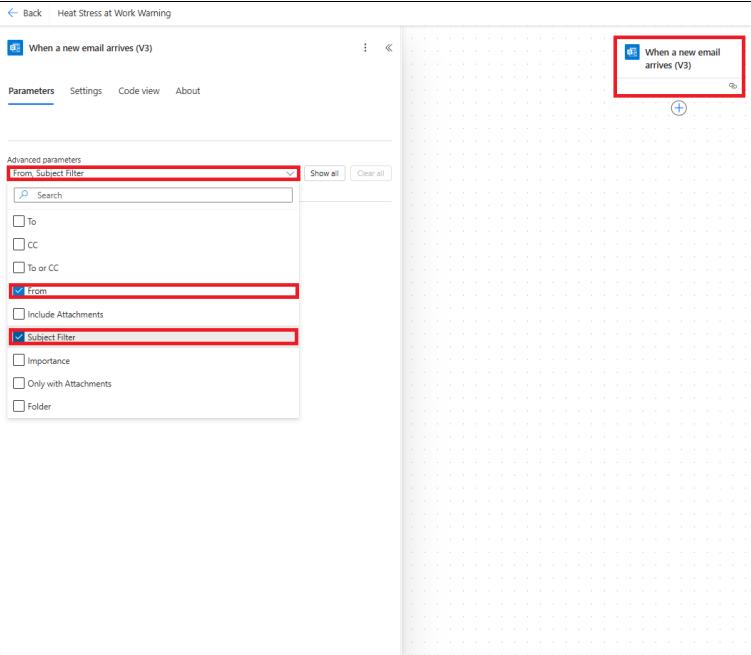
# Objective

The Automated Heat Stress at Work Warning System aims to enhance the workplace safety by providing timely alerts to relevant stakeholders. When Hong Kong Labour Department issues a Heat Stress at Work Warning, the system will automatically:

- Notify contractors and engineers via email to ensure immediate awareness.
- Send WhatsApp notifications for rapid communication and accessibility.

## Setup Instructions

Step	Action	Example
1.	Open the Power Automate (Web)	
2.	<b>Create a workflow</b> <ol style="list-style-type: none"><li>Select “Create” on the left-hand side panel</li><li>Select “Scheduled cloud flow” under “Start from blank”</li></ol>	

	<p><b>3. Build the starting automated flow</b></p> <ol style="list-style-type: none"> <li>Fill in “Flow name”</li> <li>Select “When a new email arrives(V3)” under “Choose your flow’s trigger”</li> <li>Click on “Create”</li> </ol>	 
4.	<p><b>Setting up detection of email sent from HSE</b></p> <ol style="list-style-type: none"> <li>Click on the “When a new email arrives(V3)” widget</li> <li>Select “From” and “Subject Filter” under “Advanced parameters” in the left-hand side panel</li> <li>Input <a href="mailto:XXX@towngas.com">XXX@towngas.com</a> under “From” and “暑熱警告” under “Subject Filter”</li> </ol>	

5.	<p><b>Create the second action</b></p> <ul style="list-style-type: none"> <li>I. Click on the add button below the previous action</li> <li>II. Find “Send an email(V2)” under “Add an action”</li> </ul> <p>*Note it's “Send an email(V2)” instead of “Forward an email(V2)” which could be classified as spam by system</p>	

6. **Set up the Content of Automated Sent Warning Emails**
- Add the desired recipients under “To” in the action panel
  - Input “/” under “Subject” and “Body” then select “Insert dynamic content” in the pop-up panel
  - Select the respective dynamic content for email’s “Subject” and “Body”

The image consists of three vertically stacked screenshots from a software application, likely Microsoft Power Automate or similar, illustrating the setup of an automated email workflow.

**Screenshot 1:** Shows the "Send an email (V2)" configuration screen. The "Subject" field contains the placeholder "/". A red box highlights the "Insert dynamic content" button in the toolbar above the body editor. The "Body" field is empty. The "Advanced parameters" section shows one parameter named "Subject". On the right, the workflow editor shows a trigger "When a new email arrives (V3)" connected to the action "Send an email (V2)".

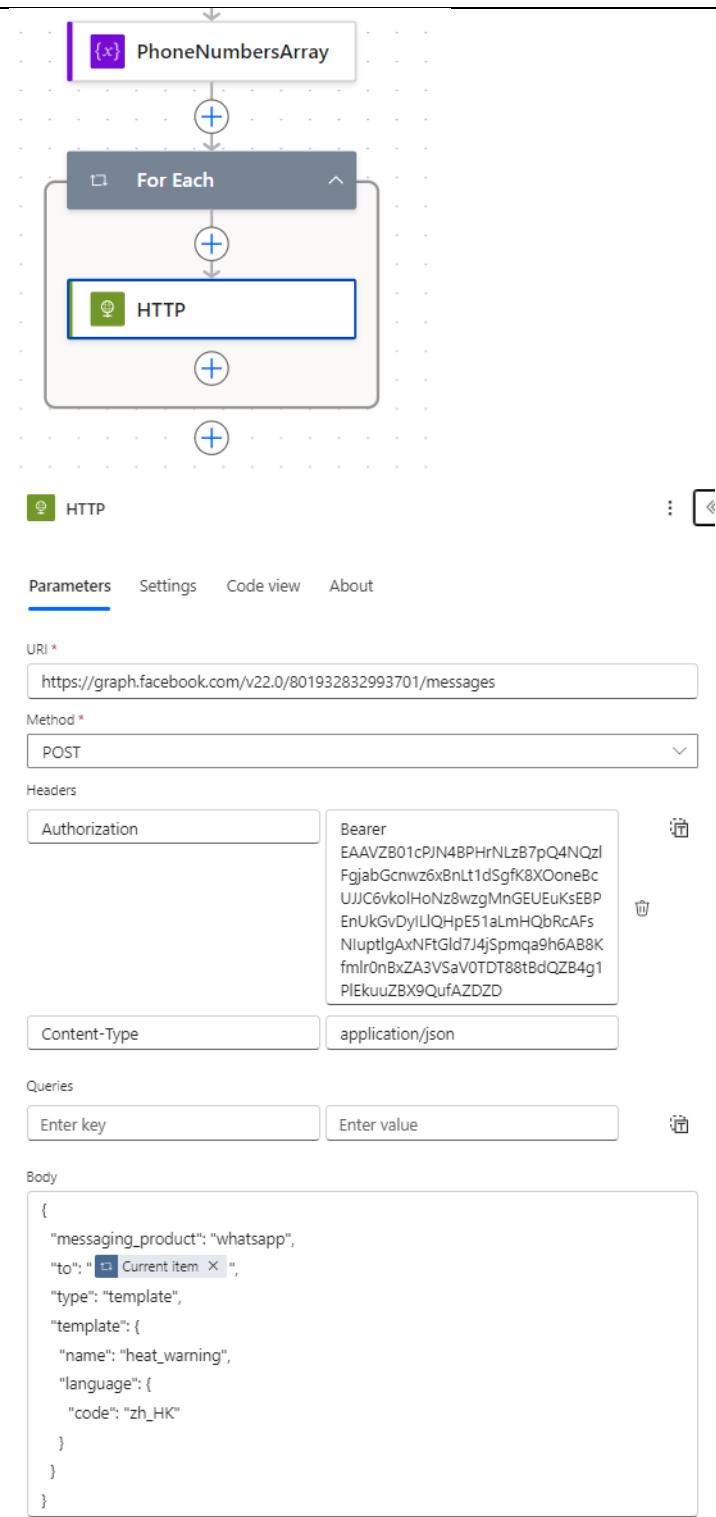
**Screenshot 2:** Shows the "Send an email (V2)" configuration screen after the "Subject" has been updated. The "Subject" field now contains "Subject: /". The "Body" field is empty. The "Advanced parameters" section shows one parameter named "Subject". The "Search" pane on the right lists the parameter "Subject" under "When a new email arrives (V3)".

**Screenshot 3:** Shows the "Send an email (V2)" configuration screen after the "Body" has been updated. The "Subject" field contains "Subject: /". The "Body" field now contains "Body: /". The "Advanced parameters" section shows one parameter named "Subject". The "Search" pane on the right lists the parameter "Subject" under "When a new email arrives (V3)".

7.	<p><b>Set up the content of phone number list</b></p> <p>I . Add “Initialize variable” action next to “Notify Contractors and Engineers” aka Send an Email (V2).</p> <p>II . Set the name to “Phone Numbers”, Type be Array, Value be phone numbers of all contractor and engineers e.g. [“+85212345678”].</p>	<p>Add an action</p> <p>Initialize variable</p> <p>Variable</p> <p>{x} Initialize variable</p> <p>{x} Set variable</p> <p>{x} Decrement variable</p> <p>{x} Increment variable</p> <p>{x} Append to array variable</p> <p>{x} Append to string variable</p> <p>(x) PhoneNumbersArray</p> <p>Name *: PhoneNumbers</p> <p>Type *: Array</p> <p>Value:</p> <pre>[ "+852XXXXXXXXX",   "+852XXXXXXXXX",   "+852XXXXXXXXX",   "+852XXXXXXXXX",   "+852XXXXXXXXX",   "+852XXXXXXXXX" ]</pre> <p>When Heat Stress Warning Issued</p> <p>Notify Contractors and Engineers</p> <p>PhoneNumbersArray</p> <p>For each</p> <p>HTTP</p>
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8. **Set up the WhatsApp Notification**

- I . Add “Apply to each” and “HTTP” actions next to PhoneNumbersArray action.  
 II . Configure HTTP action as shown in the image



9.	Click “Save” after finishing the previous steps	
8.	The workflow would be automatically turned on after being saved	

# Maintenance

## Monitoring

To check your flow's status, navigate to 'My flows' in the left panel. Your created flow will appear either in 'Cloud flows' (for personal web-created flows) or 'Shared with me' (for collaborative flows with multiple owners).

The screenshot shows the 'Power Automate' interface. On the left, there's a sidebar with various options like Home, Create, Solutions, Automation center, etc. The 'My flows' option is highlighted with a red box. The main area has a search bar at the top. Below it, there are two tabs: 'Cloud flows' (which is selected and highlighted with a red box) and 'Desktop flows'. Under 'Cloud flows', there are three flows listed: '2 h ago' (Automated), '4 h ago' (Scheduled), and '2 m ago' (Instant). To the right, there's another section titled 'Flows' with tabs for 'Cloud flows', 'Desktop flows', and 'Shared with me' (which is also highlighted with a red box). It shows a single flow named 'Heat Stress at Work Warning(Test)' which was modified '11 sec ago' and is of type 'Automated'.

After selecting the flow, the Flow Overview is shown, you'll see its current status including when alerts were last sent, average delivery time, and activation status (on/off), etc.

This screenshot shows the 'Flow Overview' for the flow 'Heat Stress at Work Warning(Test)'. At the top, there are several action buttons: Edit, Share, Save As, Delete, Send a copy, Export, Process mining (preview), Analytics, Turn off, and Repair tips off. Below that, the flow name 'Heat Stress at Work Warning(Test)' is displayed along with its status 'On'. The 'Primary owner' field is redacted. To the right, there's a 'Connections' section with an 'Edit' button, showing an 'Office 365 Outlook Permissions' connection. Below it is a 'Co-owners' section with a 'Set primary owner' and 'Share' button. Further down is a 'Process mining (preview)' section with a 'Process mining (preview)' button, an 'improve your flow' button, and a chart showing an 'Average run duration' of '00:00:01'. At the bottom, there's an 'Associated apps and flows' section with an 'Edit' button, stating 'You don't have any apps associated with this flow.' In the middle-left, there's a '28-day run history' table with columns for 'Start', 'Duration', and 'Status'. The table lists 10 runs from July 20 to July 24, all of which succeeded.

Start	Duration	Status
Jul 20, 09:29 PM (20 h ago)	00:00:02	Succeeded
Jul 20, 11:29 AM (1 d ago)	589 ms	Succeeded
Jul 27, 10:54 AM (1 d ago)	816 ms	Succeeded
Jul 27, 10:47 AM (2 d ago)	803 ms	Succeeded
Jul 26, 06:00 PM (2 d ago)	00:00:04	Succeeded
Jul 26, 11:59 AM (3 d ago)	860 ms	Succeeded
Jul 25, 06:41 PM (3 d ago)	924 ms	Succeeded
Jul 25, 11:52 AM (4 d ago)	861 ms	Succeeded
Jul 24, 08:48 PM (4 d ago)	00:00:01	Succeeded
Jul 24, 11:40 AM (4 d ago)	00:00:01	Succeeded

## Co-owner

You can add co-owner in the Flow Overview by clicking the “Share” button in the Flow Overview.

The screenshot shows the Microsoft Flow Overview page. At the top, there are navigation links: Analytics, Turn off, Repair tips off, and Flow checker. Below these are several sections:

- Connections**: Shows a connection to "Office 365 Outlook" with a green checkmark icon. A red box highlights the "Share" button next to the "Set primary owner" link.
- Co-owners**: A section where users can manage co-owners. It includes a "Set primary owner" link and a "Share" button, which is also highlighted with a red box.
- Process mining (preview)**: Displays average run duration as 00:00:01. A blue water droplet icon is present.
- Associated apps and flows**: A section stating "You don't have any apps associated with this flow." It includes a "Learn more" link.

On the left side, there is a table titled "All runs" with columns for "Status". The table shows four rows, all of which are colored light green and labeled "Succeeded".

The screenshot shows the 'Edit' page for a flow named 'Heat Stress at Work Warning(Test)'. In the top right corner, there is an 'Edit' button. The page is divided into several sections:

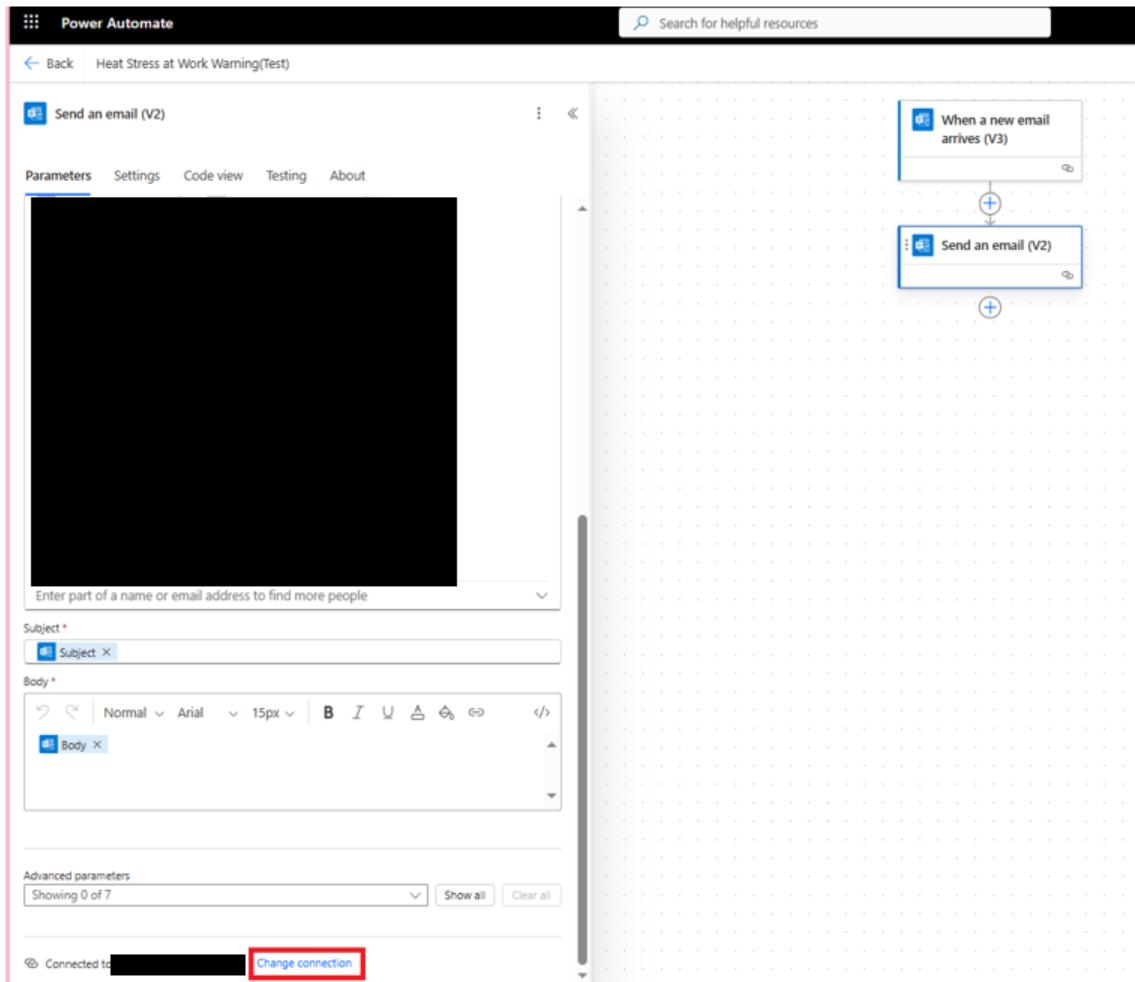
- Co-owners:** A section explaining what it means to add an owner and how they can manage the flow. It includes a link to 'Learn more'.
- Add a user or group as owner:** A text input field labeled 'Enter names, emails, or user groups' with a red border around it. Below the input field are two empty placeholder boxes with trash can icons.
- Embedded connections:** A section stating that everyone listed as an owner will have access to all these connections. It includes a link to 'Learn more'.
- Connections in use:** A section titled 'Connections listed are actively being used in this flow.' It contains two entries, both labeled 'Office 365 Outlook' with a blue icon and a green checkmark.

## Update Connection

To alter the sender of the warning email. You may click “Edit” on the Flow Overview Page.

The screenshot shows the 'Edit' page for the same flow. The top navigation bar has an 'Edit' button highlighted with a red box. Below the navigation bar, the page structure is similar to the previous screenshot, with sections for 'Details', '28-day run history', and other flow-related information.

After opening the editing panel of the flow, click the “Send an email(V2)” widget. Then click the “Change connection” button at the bottom of the action panel.



Select the desired sender or add a new connection by signing in that person's account.

The screenshot shows the Microsoft Power Automate interface. On the left, a 'Change connection' dialog is open, listing existing connections. It shows two entries: one with a status of 'Connected' and another with a status of 'Not connected'. Both entries have a 'Send an email (V2)' icon. Below the list are 'Add new' and 'Cancel' buttons. To the right of the dialog, a workflow canvas displays a sequence of steps: 'When a new email arrives (V3)' followed by 'Send an email (V2)'. A plus sign icon is located at the bottom right of the canvas. On the far left, a vertical sidebar shows a navigation path: 'Back / Heat Stress at Work Warning(Test)'. This pattern repeats on the right side of the main content area.